

ROUTING AND TRANSMITTAL S.

Date

7/1

TO: (Name, office symbol, room number,
building, Agency/Post)

Initials

Date

1. PAT

2.

3.

4.

5.

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

N. WEI CALLED 7/1 ABOUT
REMOVAL OF THE 35% RED.
FOR THE INTERIM LIMITS.
SENT FAX (ATTACHED) TO
SUPPORT POSITION. ALSO REFERRED
TO S-K MAY 21, 1991 LETTER -
MARCH 1991 MONITORING DATA.
DID YOU TALK WITH SIREILA + PATI
ABOUT THIS IN HAWAII? Mike

DO NOT use this form as a RECORD of approvals, concurrences, disposals,
clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

YOU CAME BACK JUST
IN TIME. KARMA.

Room No.—Bldg.

Phone No.

StarKist Seafood Company

Memorandum

DATE: 1 July, 1991 VIA FAX TRANSMISSION

TO: Mike Lee, US EPA Region 9

FROM: Norman Wei *NW*

SUBJECT: Removal of Soluble Nitrogen by Dissolved Air Flotation System

Further to our telephone conversation this morning, please find attached results of special analyses by our contract laboratory which show the high percent soluble fraction of our wastes in American Samoa.

Analyses taken on April 22 and 26 show that between ~~65 and 75~~ *what 90 is?* percent of the influent nitrogen is in soluble form. Consistent attainment of 35 percent removal of such waste composition is not possible with a dissolved air flotation unit.

We have also observed that ~~as the influent concentrations decrease,~~ the removal efficiency of the DAF cell also decreases. We are very concerned that as we strive to reduce our nutrient loading at the source, we would decrease the concentration of our influent and cause further drop in the removal efficiency - thereby triggering further penalties.

In my discussion with Jim Cox of Van Camp, he pointed out that Samoa Packing is also observing the same phenomenon with their DAF cell. Van Camp strongly supports StarKist's request to the US EPA to have the ~~35 percent removal requirement rescinded in both~~ Administrative Orders.

Without the 35 percent removal requirement, we at StarKist will be able to improve on our source reduction program and continue to meet the following interim limitations as stipulated in the Consent Decree by a reasonable margin:

Total Nitrogen monthly average loading	1785 lbs/day
Total Nitrogen daily maximum loading	2745 lbs/day
Total Phosphorus monthly average loading	170 lbs/day
Total Phosphorus daily maximum loading	320 lbs/day

Review of our monthly data will show that our plant has consistently met the above limitations. Please don't hesitate to contact me if you need additional information.

cc: S. Wiegman - ASEPA
M. Callaghan
R. Ward

StarKist Samoa, Inc.

Composition of StarKist Samoa's Influent and Effluent

April 22			Percent Soluble	April 26			Percent Soluble
Influent				Influent			
TN	unfiltered	143		TN	unfiltered	177	
TN	filtered	107	74.83%	TN	filtered	116	65.54%
Effluent				Effluent			
TN	unfiltered	94.9		TN	unfiltered	77.7	
TN	filtered	75.2	79.24%	TN	filtered	75.6	97.30%
Influent				Influent			
TP	unfiltered	20.2		TP	unfiltered	24.8	
TP	filtered	17.3	85.64%	TP	filtered	21.4	86.29%
Effluent				Effluent			
TP	unfiltered	11.5		TP	unfiltered	14.1	
TP	filtered	9.61	83.57%	TP	filtered	12.6	89.36%

Based on data reported by Aecos Laboratory.

Received
28 MAY 1991



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

May 21, 1991

Copy to Mike,
Norm

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of March 1991 under the
U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of March 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us yesterday. The delay was due to some unscheduled equipment maintenance at the laboratory.

All the daily maximum and monthly average limitations for nitrogen and phosphorus were met. In fact, the monthly average loadings for both of these parameters were substantially below the Administrative Order's limitations.

There were two days in March when the effluent nitrogen loadings exceeded 65 percent of the maximum influent loading for the month. These are violations in accordance with the rules set forth by the U.S. EPA even though the monthly average loading was almost less than half of the limitation.

In reviewing the influent and effluent data since the canneries began high strength waste segregation, it is apparent that the removal efficiency of the DAF cell for nitrogen decreases as the influent loading decreases. This presents a dilemma for our plant especially since we are striving to reduce the nutrient loading to the harbor as much as possible through reduction at the source. For example, we have already purchased an industrial vacuuming device at considerable expense in order to further reduce the loading of fish scrap (nitrogen and phosphorus) to the treatment plant. A successful source reduction program will reduce the loading to the harbor but at the same time also reduce the removal efficiency for the treatment plant and hence may subject the cannery to severe stipulated penalties.

Mr. Pati Faiai
May 21, 1991
Page 2

We respectfully request that your agency and the federal government consider rescinding the 35 percent removal efficiency requirement in the Administrative Order.

Without the removal of this requirement and given the severe stipulated penalties associated with it, we would have no choice but to eliminate our source reduction program. This would be an unfortunate step backward and contrary to what we are all striving for - a cleaner Pago Pago Harbor. We are committed to a cleaner harbor and we sincerely believe that we can achieve that goal better without the impediment of the 35 percent removal restriction.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Norman Wei
Mr. Ralph A. Ward
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT

March 1991

Total Phosphorus

Date March	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7030	7.30	3.51	103	50
4	1.9100	7.10	3.21	113	51
8	1.6844	7.50	3.76	105	53
11	1.7955	6.70	2.92	100	44
15	1.5325	15.20	5.77	194	74
20	1.7888	26.70	11.50	397	171
22	1.9861	20.90	8.02	345	132
25	1.7553	12.90	8.13	188	119
29	2.0035	19.50	8.03	325	134
Average	1.7955	13.76	6.09	208	92
Maximum	2.0035	26.70	11.50	397	171

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Daily Maximum	320
Daily Maximum (35% removal)	258

Total Nitrogen

Date March	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7030	72.00	54.10	1020	766
4	1.9100	66.30	50.70	1053	805
8	1.6844	65.30	48.30	915	677
11	1.7955	51.00	37.90	762	566
15	1.5325	83.80	79.10	1068	1008
20	1.7888	135.00	92.70	2008	1379
22	1.9861	114.00	81.50	1883	1346
25	1.7553	64.30	66.80	939	975
29	2.0035	91.80	73.70	1529	1228
Average	1.7955	82.61	64.98	1242	972
Maximum	2.0035	135.00	92.70	2008	1379

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Daily Maximum	2745
Daily Maximum (35% removal)	1305

March 1991

Star-Kist Samoa

6/7/91

TOTAL NITROGEN

Date	I N F L U E N T Flow	Conc.	Load	(Inf. Load x 0.65)	E F F L U E N T Flow	Conc.	Load	% Removal	DAILY MAX IEL VIOLA
3/1/91	1.7030	72.0	1023	665	1.7030	54.1	768	25	NO
3/4/91	1.9100	66.3	1056	686	1.9100	50.7	808	24	NO
3/8/91	1.6844	65.3	917	596	1.6844	48.3	679	26	NO
3/11/91	1.7955	51.0	764	496	1.7955	37.9	568	26	NO
3/15/91	1.5325	83.8	1071	696	1.5325	79.1	1011	6	NO
3/20/91	1.7888	135.0	2014	1309	1.7888	92.7	1383	31	<u>YES</u>
3/22/91	1.9861	114.0	1888	1227	1.9861	81.5	1350	29	<u>YES</u>
3/25/91	1.7553	64.3	941	612	1.7553	66.8	978	-4	NO
3/29/91	2.0035	91.8	1534	997	2.0035	73.7	1231	20	NO

Monthly
Average

1245

809

975

20

MONTHLY AVERAGE IEL

809.4

VIOLATION:

YES

Daily
Maximum

1309

DAILY MAXIMUM IEL

1309

DAILY MAXIMUM VIOLATIONS:

2

Star-Kist Samoa

6/10/91

TOTAL PHOSPHORUS

Date	I N F L U E N T			(Inf. Load x 0.65)	E F F L U E N T			% Removal	MONTHLY M IEL VIOLA
	Flow	Conc.	Load		Flow	Conc.	Load		
3/1/91	1.7030	7.3	104	67	1.7030	3.5	50	52	NO
3/4/91	1.9100	7.1	113	74	1.9100	3.2	51	55	NO
3/8/91	1.6844	7.5	105	68	1.6844	3.8	53	50	NO
3/11/91	1.7955	6.7	100	65	1.7955	2.9	44	56	NO
3/15/91	1.5325	15.2	194	126	1.5325	5.8	74	62	NO
3/20/91	1.7888	26.7	398	259	1.7888	11.5	172	57	NO
3/22/91	1.9861	20.9	346	225	1.9861	8.0	133	62	NO
3/25/91	1.7553	12.9	189	123	1.7553	8.1	119	37	NO
3/29/91	2.0035	19.5	326	212	2.0035	8.0	134	59	NO

Monthly
Average

208

135

92

54

MONTHLY AVERAGE IEL

135.4

VIOLATION:

NO

Daily
Maximum

259

DAILY MAXIMUM IEL

259

DAILY MAXIMUM VIOLATIONS

0



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105

March 26, 1991

Maurice Callaghan
General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Interim Effluent Limits for the EPA Administrative Order
Issued to Star-Kist Samoa, Inc.

Dear Mr. Callaghan:

This letter is in regard to the U.S. Environmental Protection Agency's (USEPA) Administrative Order, Docket No. IX-FY90-22, issued June 18, 1990, to Star-Kist Samoa, Inc.

Under the Order for Compliance, Section 4(e), the Administrative Order allows for adjusting Star-Kist's National Pollutant Discharge Elimination System (NPDES) permit's interim effluent limits (IELs) for nitrogen and phosphorus. This modification could be made "...at EPA's sole discretion..." after analysis of data collected during the first three months of segregation and ocean disposal of high-strength cannery waste. Our analysis of the compliance data submitted shows that Star-Kist is meeting the existing IELs with very few exceptions, thus we do not believe that adjusting the existing IELs is necessary.

In its December 19, 1990 letter to USEPA, Star-Kist Seafood Company put forth an argument, based on actual field data, that because there was a much lower percentage removal of total phosphorus (36.5%) due to high strength waste (HSW) segregation than was used in calculating the present IEL (60%), an adjustment of its phosphorus IELs was justified. While we acknowledge that the assumptions which were utilized to calculate the IELs could be slightly adjusted based on the data obtained from actual HSW segregation and DAF processes, our review of the compliance record shows that Star-Kist is achieving the existing IELs with very few exceptions. Thus, in the interest of maximizing the improvements in water quality of Pago Pago Harbor, we find no compelling reason to change the existing IELs for nitrogen and phosphorus and the existing IELs for nitrogen and phosphorus established by the Administrative Order remain unchanged.

-2-

Should you have any questions regarding this matter, please feel free to call Pat Young at (415) 744-1591.

Sincerely,

Keith Takahashi

Harry Harry Seraydarian
Director, Water Management Division

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Virginia Gibbons, AS Attorney General's Office

MAR 26 1991

Maurice Callaghan
General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

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SYMBOL	E-4	E-4	E-4/101	RC-4	W-1	
SURNAME	ppgms	ppgms	ppgms	Nutt		
DATE	3/20/91	3/20/91	3/21/91	3/21/91	3-22	
U.S. EPA CONCURRENCES					OFFICIAL FILE COPY	

-2-

Should you have any questions regarding this matter, please feel free to call Pat Young at (415) 744-1591.

Sincerely,

Harry Seraydarian
Director, Water Management Division

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Virginia Gibbons, AS Attorney General's Office

Sheila: FYI.
ST

StarKist Seafood Company

An Affiliate of H. J. Heinz Company



Pat *EPA used*
26 DEC 1990
180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213 590-0900

December 19, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Lovelace:

I am writing this letter concerning StarKist Samoa's interim effluent limitations under EPA's Administrative Order.

As we all know, these interim effluent limitations were developed on the basis of some theoretical assumptions with respect to the percentage of nutrients that would be removed through high strength waste segregation. The percentage figures most frequently used had been 50 to 60 percent removal through segregation alone. That was precisely the reason why your agency required us to conduct the 3-month intensive sampling program from August to October.

As I stated in my letter to you dated March 1, 1990, I think it is important that the interim limitations be re-evaluated and adjusted accordingly based on actual field data.

Actual field data show a much lower percent segregation of total phosphorus. A comparison of influent phosphorus loadings from January 1990 to July 1990 with the post segregation period (August to November 1990) shows that only 36.5 percent of the phosphorus were removed through segregation of high strength waste (See attached table). This is substantially below the theoretical assumption of 50 to 60 percent which was used in developing the interim limitations. The percent segregation for total nitrogen is approximately 67 percent - much more in line with the assumption.

Based on the above findings, we would respectfully request that you adjust the effluent limitation for total phosphorus accordingly.

Yours very truly,

Norman S. Wei
Manager, Environmental Engineering

cc: J. Ciko, Jr.
M. Callaghan
R. Ward

Before High Strength Waste Segregation

	Influent TP Loading (#/day)	Effluent TP Loading (#/day)	Influent TN Loading (#/day)	Effluent TN Loading (#/day)
January 90	726	219	6191	3147
February 90	678	224	6469	2775
Mar 90	935	347	8538	3376
April 90	1106	383	9230	3222
May 90	1147	333	7781	2941
June 90	1178	430	7881	2919
July 90	1001	319	6523	2335
Average Jan 90 – July 90	967	322	7516	2959

During High Strength Waste Segregation

	Influent TP Loading (#/day)	Effluent TP Loading (#/day)	Influent TN Loading (#/day)	Effluent TN Loading (#/day)
August 90	745	190	3337	1326
September 90	647	169	2343	1070
October 90	530	145	2085	1226
November 90	536	150	2272	1119
Average Aug 90 – Nov 90	615	164	2509	1185

% segregation	36.5%	66.6%
---------------	-------	-------

02/11/92

15:22

415 744 1604

USEPA

001

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	1439
CONNECTION TEL	2880116846442440PP
CONNECTION ID	
START TIME	02/11 15:19
USAGE TIME	02'57
PAGES	6
RESULT	OK

OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX NO: (415) 744-1604 FTS 484-1604
VERIFICATION NO: (415) 744-1599 FTS 484-1599

DATE: 2/11/92 PAGES: 6 (incl. cover)

TO: Maurice Callaghan
ORGANIZATION: Star-Kist Samoa
FAX NO: (684) 644-2440 PHONE NO: (684) 644-4231
SUBJECT: Amended Administrative Order

FROM: Pat Young
ORGANIZATION: USEPA
PHONE NO: (415) 744-1591

NOTE: _____

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	1437
CONNECTION TEL	2880116846335801PP
CONNECTION ID	AS EPA
START TIME	02/11 15:08
USAGE TIME	07'46
PAGES	12
RESULT	OK

January 23, 1992

Pat Young
American Samoa Program Manager (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Pat:

The canneries (StarKist Samoa, Inc. and Samoa Packing) are planning to commence pumping their treated effluent through the newly installed joint marine pipeline during the week of February 10th. This mode of discharge will continue through to March 7th and beyond unless there are mechanical problems with the pumping system in which case the existing outfalls will be utilized until the problem is corrected.

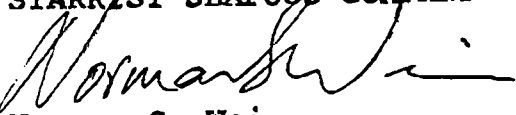
In view of the fact that the NPDES permits will not likely be issued in time for the March 7, 1992 deadline, the canneries hereby request permission to test out and utilize the new pipeline system starting the week of February 10, 1992.

The canneries understand that the proposed new NPDES limits will be in effect when the new pipeline is used. The existing interim limits will apply when the existing outfalls are utilized.

We thank you for your assistance in helping to expedite this matter.

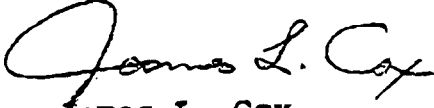
Sincerely,

STARKIST SEAFOOD COMPANY



Norman S. Wei
Senior Manager
Environmental Engineering

VAN CAMP SEAFOOD CO., INC.



James L. Cox
Director
Engineering and Environmental Affairs

cc: M. Macready - Samoa Packing
M. Callahan - StarKist Samoa, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105

30 OCT 1991

Maurice W. Callaghan
General Manager
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Revision of Interim Effluent Limits for Nitrogen and Temperature for USEPA's Administrative Order Issued to StarKist Samoa, Inc.

Dear Mr. Callaghan:

On October 4, 1991 Norman Wei of your company had an extensive discussion with staff from the Office of Pacific Island and Native American Programs regarding StarKist Samoa's draft assessment of its Dissolved Air Flotation (DAF) Unit. This assessment, to maximize the removal efficiency rate for both nitrogen and phosphorus from StarKist's effluent, and implementation of its findings, was required by EPA's letter of August 13, 1991, which modified StarKist's interim effluent limit for nitrogen as established by USEPA's Administrative Order, Docket No. IX-FY90-22.

Mr. Wei's assessment of the DAF unit is that it is designed primarily to remove oil and grease, particulate matter and phosphorus through chemical coagulation, and its consistency and high removal efficiency of these pollutants indicate no operational problems. However, the DAF's removal efficiency of nitrogen, especially in soluble form, is more problematic. Mr. Wei recently had a laboratory in Hawaii analyze the cannery influent and effluent which showed that about 72 to 80 percent of the total nitrogen is in soluble form, and that the soluble TN fraction in the treated effluent averages 85 percent. However, the DAF unit is able to remove about 60 percent of the particulate total nitrogen loading.

Mr. Wei also contends that the plant has been implementing various forms and degrees of waste minimization, from water reduction to vacuum cleaning, which, coupled with high-strength waste segregation, has resulted in a substantial decrease in the nitrogen influent loadings to the DAF unit, and a decrease in its removal efficiency. Monthly average dosages of alum and polymer to the DAF unit has not decreased, in fact, substantial increases in chemical dosages were noted in May and July.

It was also noted by Mr. Wei that StarKist was in violation of its modified monthly average interim effluent limit for nitrogen for the month of August, as it was unable to meet the reduced 25% removal efficiency rate established in our letter of August 13, 1991 (the original rate was 35%). He expressed concern that StarKist would not be able to consistently meet the interim effluent limits for nitrogen because of the factors stated above.

We have reviewed the monitoring data from August 1990 through August 1991, and the additional data submitted by Mr. Wei. Based on our review, we are revising the interim effluent limits for nitrogen by eliminating the DAF efficiency rate of 25%, and replacing it with limits based on pounds of nitrogen per ton of fish processed. The previous fixed monthly average limit of 1675 lbs./day and the daily maximum limit of 2440 lbs./day remain the same.

Thus, effective as of September 1, 1991, USEPA hereby modifies its Administrative Order issued on June 18, 1990 to StarKist Samoa, Inc. (Docket No. IX-FY90-22), by revising Section 3 of the Order for Compliance as follows (changes are in bold):

(a) Monthly Average of Total Nitrogen (lbs./day): The lesser of i) 1675 lbs/day, OR, ii) **(3.76 lbs. of total nitrogen/ton of fish processed/day) x (Monthly average of fish processed in tons/day)**

(b) Daily Maximum of Total Nitrogen (lbs./day): The lesser of: i) 2440 lbs./day, OR, ii) **(4.66 lbs. of total nitrogen/ton of fish processed/day) x (Daily maximum of fish processed in tons/day).**

The new interim effluent limits were calculated using the effluent data from August 1990 through August 1991, "normalizing" the data to reflect pounds of nitrogen produced per ton of tuna processed. The "normalized" monthly average limit of 3.76 is one standard deviation plus the 12-month average of the effluent data in pounds of nitrogen produced per ton of fish processed, multiplied by that month's average of fish processed in tons per day.

The "normalized" daily maximum limit of 4.66 is two standard deviations plus the 12-month average of the effluent data in pounds of nitrogen produced per ton of fish processed, multiplied by that month's daily maximum production in tons of fish processed per day.

In another matter pertaining to interim effluent limits, we recently received the American Samoa Environmental Quality Commission's (ASEQC) request to approve its adoption of a variance of its water quality standards, specifically, a variance of temperature limits for StarKist's discharges to Pago Pago Harbor until March 7, 1992. As you pointed out in your letter to us of March 7, 1991, on March 8, 1991, Star-Kist's daily maximum temperature effluent limit changed from an interim limit of 90 degrees Fahrenheit to 85 degrees Fahrenheit, which is based on American Samoa's water quality standard for temperature.

We understand that Star-Kist has installed a temperature control management system which was to be on-line in May 1991. Your request for extension of the interim effluent limit for temperature was to accommodate completion, start-up and testing of this system which is designed to achieve the 85 degree Fahrenheit temperature limit. By March 7, 1992, Star-Kist expects to consistently meet the effluent daily maximum temperature limit of 85 degrees Fahrenheit.

After public notice and a public hearing on this variance request, the ASEQC granted a variance on April 10, 1991, finding that 1) the discharge at a temperature of 90 degrees Fahrenheit would not endanger human health or safety; 2) compliance with the temperature limitation would likely produce serious hardship without equal or greater benefits to the public; and 3) the relative interests of the public, other property owners, and the applicant were considered.

EPA hereby approves the variance to the American Samoa water quality standards for temperature for StarKist Samoa NPDES Permit No. AS0000019 and the Administrative Order is modified to add two additional conditions to Section 3 of the Order for Compliance, as follows (changes are in bold):

"3. Respondent shall, no later than August 1, 1990, achieve and thereafter maintain compliance with the following interim effluent limits for nitrogen, ~~and~~ **phosphorus and temperature** and shall remain in compliance with these interim effluent limits at all times until March 6, 1992:"

A new subsection, (e), shall be added as follows:

"(e) Daily Maximum of Temperature: 90 degrees
Fahrenheit."

These changes are effective as of April 10, 1991, the date
of the EQC's approval of its variance.

Should you have any questions regarding any of these
changes, please contact Pat Young, American Samoa Program
Manager, at (415) 744-1591.

Sincerely,

Keith Takahashi

for Harry Seraydarian
Director, Water Management Division

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Virginia Gibbons, AS Attorney General's Office
American Samoa High Court
Norman Wei, StarKist Seafoods, Inc.

30 OCT 1991

Maurice W. Callaghan
General Manager
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Revision of Interim Effluent Limits for Nitrogen and Temperature for USEPA's Administrative Order Issued to StarKist Samoa, Inc.

Dear Mr. Callaghan:

On October 4, 1991 Norman Wei of your company had an extensive discussion with staff from the Office of Pacific Island and Native American Programs regarding StarKist Samoa's draft assessment of its Dissolved Air Flotation (DAF) Unit. This assessment, to maximize the removal efficiency rate for both nitrogen and phosphorus from StarKist's effluent, and implementation of its findings, was required by EPA's letter of August 13, 1991, which modified StarKist's interim effluent limit for nitrogen as established by USEPA's Administrative Order, Docket No. IX-FY90-22.

Mr. Wei's assessment of the DAF unit is that it is designed primarily to remove oil and grease, particulate matter and phosphorus through chemical coagulation, and its consistency and high removal efficiency of these pollutants indicate no operational problems. However, the DAF's removal efficiency of nitrogen, especially in soluble form, is more problematic. Mr. Wei recently had a laboratory in Hawaii analyze the cannery influent and effluent which showed that about 72 to 80 percent of the total nitrogen is in soluble form, and that the soluble TN fraction in the treated effluent averages 85 percent. However, the DAF unit is able to remove about 60 percent of the particulate total nitrogen loading.

SYMBOL	E-4	E-4	E-4 ¹	W-5 ²	K-5	W-1
SURNAME	<i>myams</i>	<i>myams for Mike</i>	<i>Conjunct</i>	<i>OL</i>	<i>IP</i>	<i>K</i>
DATE	10/17/91	10/17/91	10/17/91	10/29/91	10/30/91	10-30
U.S. EPA CONCURRENCES					OFFICIAL	FILE COPY

Mr. Wei also contends that the plant has been implementing various forms and degrees of waste minimization, from water reduction to vacuum cleaning, which, coupled with high-strength waste segregation, has resulted in a substantial decrease in the nitrogen influent loadings to the DAF unit, and a decrease in its removal efficiency. Monthly average dosages of alum and polymer to the DAF unit has not decreased, in fact, substantial increases in chemical dosages were noted in May and July.

It was also noted by Mr. Wei that StarKist was in violation of its modified monthly average interim effluent limit for nitrogen for the month of August, as it was unable to meet the reduced 25% removal efficiency rate established in our letter of August 13, 1991 (the original rate was 35%). He expressed concern that StarKist would not be able to consistently meet the interim effluent limits for nitrogen because of the factors stated above.

We have reviewed the monitoring data from August 1990 through August 1991, and the additional data submitted by Mr. Wei. Based on our review, we are revising the interim effluent limits for nitrogen by eliminating the DAF efficiency rate of 25%, and replacing it with limits based on pounds of nitrogen per ton of fish processed. The previous fixed monthly average limit of 1675 lbs./day and the daily maximum limit of 2440 lbs./day remain the same.

Thus, effective as of September 1, 1991, USEPA hereby modifies its Administrative Order issued on June 18, 1990 to StarKist Samoa, Inc. (Docket No. IX-FY90-22), by revising Section 3 of the Order for Compliance as follows (changes are in bold):

(a) Monthly Average of Total Nitrogen (lbs./day): The lesser of i) 1675 lbs/day, OR, ii) **(3.76 lbs. of total nitrogen/day/ton of fish processed) x (Monthly average of fish processed in tons/day)**

(b) Daily Maximum of Total Nitrogen (lbs./day): The lesser of: i) 2440 lbs./day, OR, ii) **(4.66 lbs. of total nitrogen/day/ton of fish processed) x (Daily maximum of fish processed in tons/day).**

The new interim effluent limits were calculated using the effluent data from August 1990 through August 1991, "normalizing" the data to reflect pounds of nitrogen produced per ton of tuna processed. The "normalized" monthly average limit of 3.76 is one standard deviation plus the 12-month average of the effluent data in pounds of nitrogen produced per ton of fish processed, multiplied by that month's average of fish processed in tons per day.

The "normalized" daily maximum limit of 4.66 is two standard deviations plus the 12-month average of the effluent data in pounds of nitrogen produced per ton of fish processed, multiplied by that month's daily maximum production in tons of fish processed per day.

In another matter pertaining to interim effluent limits, we recently received the American Samoa Environmental Quality Commission's (ASEQC) request to approve its adoption of a variance of its water quality standards, specifically, a variance of temperature limits for StarKist's discharges to Pago Pago Harbor until March 7, 1992. As you pointed out in your letter to us of March 7, 1991, on March 8, 1991, Star-Kist's daily maximum temperature effluent limit changed from an interim limit of 90 degrees Farenheit to 85 degrees Farenheit, which is based on American Samoa's water quality standard for temperature.

We understand that Star-Kist has installed a temperature control management system which was to be on-line in May 1991. Your request for extension of the interim effluent limit for temperature was to accommodate completion, start-up and testing of this system which is designed to achieve the 85 degree Farenheit temperature limit. By March 7, 1992, Star-Kist expects to consistently meet the effluent daily maximum temperature limit of 85 degrees Farenheit.

After public notice and a public hearing on this variance request, the ASEQC granted a variance on April 10, 1991, finding that 1) the discharge at a temperature of 90 degrees Fahrenheit would not endanger human health or safety; 2) compliance with the temperature limitation would likely produce serious hardship without equal or greater benefits to the public; and 3) the relative interests of the public, other property owners, and the applicant were considered.

EPA hereby approves the variance to the American Samoa water quality standards for temperature for StarKist Samoa NPDES Permit No. AS0000019 and the Administrative Order is modified to add two additional conditions to Section 3 of the Order for Compliance, as follows (changes are in bold):

"3. Respondent shall, no later than August 1, 1990, achieve and thereafter maintain compliance with the following interim effluent limits for nitrogen, ~~and~~ **phosphorus and temperature** and shall remain in compliance with these interim effluent limits at all times until March 6, 1992:"

A new subsection, (e), shall be added as follows:

"(e) Daily Maximum of Temperature: 90 degrees
Fahrenheit."

These changes are effective as of April 10, 1991, the date
of the EQC's approval of its variance.

Should you have any questions regarding any of these
changes, please contact Pat Young, American Samoa Program
Manager, at (415) 744-1591.

Sincerely,

Harry Seraydarian
Director, Water Management Division

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Virginia Gibbons, AS Attorney General's Office
American Samoa High Court
Norman Wei, StarKist Seafoods, Inc.



AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799

In reply refer to:

**OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY COMMISSION
Serial:300**

June 7, 1991

Maurice Callaghan
General Manager
Star Kist Samoa
P. O. Box 468
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

The Environmental Quality Commission (EQC) has considered your request dated March 7, 1991, for a variance of temperature limitations for discharges to Pago Pago Harbor. A public notice on this variance request was issued and no comments were received. The EQC approved the variance on April 10, 1991, after finding 1) the discharge at a temperature of 90 degrees Fahrenheit will not endanger human health or safety; 2) compliance with the temperature limitation will likely produce serious hardship without equal or greater benefits to the public; and 3) the relative interests of the public, other property owners, and the applicant were considered.

This variance will allow the discharge of treated effluent from the outfall at 90 degrees Fahrenheit until March 8, 1992. Reporting as required in the National Pollutant Discharge Elimination System permit for this outfall will be utilized to determine compliance with the variance.

Please feel free to contact me if you have any questions or require any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Pati Faiai", is positioned above the typed name of the signatory.

Pati Faiai, Executive Secretary
Environmental Quality Commission

cc: Pat Young, USEPA
ASEPA Environmental Coordinator
ASEPA Enforcement Branch



Starkist SAMOA, Inc.

P.O. BOX 368

PAGO PAGO

AMERICAN SAMOA 96799



March 7, 1991

Mr. Norman Lovelace
OPINAP
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA.

Dear Mr. Lovelace:

StarKist Samoa hereby requests that the U.S. Environmental Protection Agency extend the interim temperature limitation of 90°F in StarKist Samoa's NPDES permit to March 6, 1992.

The reason for this request is provided below:

At the present time, StarKist Samoa is meeting the interim temperature limit of 90°F. On March 8th 1991, American Samoa's water quality standard for temperature will go into effect under the plant's NPDES Permit. The maximum temperature limitation will be 85°F. StarKist Samoa, Inc. will not be able to meet this limitation at all times by this date.

In order to meet this new temperature limit, StarKist Samoa began the implementation of a temperature control management system about 6 months ago at a cost of \$240,000. The system is briefly described below:

1. The scrubber water in the reduction plant will be recycled. This will eliminate about 200,000 gallons of scrubber water at over 95°F.
2. The boiler blowdown water and the can wash water will be routed to a new sump and processed through a new cooling tower which will cool the water temperature from 150°F to 95°F. The cooled water will then be discharged to the retention tank.
3. Cold thaw water will be retained in a holding tank fitted with the necessary pump and valve control system to enable it to feed cold thaw water into the treatment plant when temperature of the treatment plant exceeds a certain level.

This system is now 80 percent complete and commissioning is scheduled for early May 1991. Although this system is designed to achieve American Samoa's water quality standard for temperature,

Mr. Norman Lovelace

March 7, 1991

Page 2

+++++

A start-up period and extensive testing of full-scale operation are required. For this reason, StarKist Samoa requests that a variance be granted by the Environmental Quality Commission until March 6, 1992.

StarKist Samoa fully expects to meet the temperature standard by March 7, 1992.

StarKist Samoa, Inc. has submitted its application to American Samoa Government for variance from temperature requirements of the Section 24.02606 (a) (6), Water Quality Standards.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: P. Faiai - EQC
R. A. Ward
N. Wei

13 AUG 1991

Maurice W. Callaghan
General Manager
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Revision of Interim Effluent Limits for Nitrogen for
the EPA Administrative Order Issued to StarKist Samoa, Inc.

Dear Mr. Callaghan:

We are in receipt of correspondence from you and Norman Wei requesting the U.S. Environmental Protection Agency (USEPA) consider modifying the interim effluent limits for nitrogen presently established under the USEPA's Administrative Order, Docket No. IX-FY90-22, issued June 18, 1990 to StarKist Samoa, Inc. You requested that USEPA consider rescinding the 35 percent removal efficiency requirement of the Dissolved Air Flotation (DAF) wastewater treatment system which is used in calculating the monthly interim effluent limits of nitrogen and phosphorus for your cannery's wastewater discharge as permitted under the National Pollutant and Discharge Elimination System (NPDES) Permit No. AS0000019. The basis for your request was as follows:

- Your review of the influent and effluent data since high-strength waste segregation began in August of 1990 shows that the removal efficiency of the DAF cell for nitrogen decreases as the influent concentration decreases. The monthly average loadings for nitrogen has decreased substantially since August.
- Your analysis of the nitrogen shows that 66-76 percent of the influent nitrogen is in soluble form, thus you maintain that consistent attainment of the 35 percent removal rate is not possible with a DAF unit.
- StarKist is attempting to decrease its influent loadings through implementation of a source reduction

SYMBOL	E-4	E-4	E-4 1	RC-2-4	LV-5	W-7
SURNAME	<i>muang</i>	<i>Free</i>	<i>W. J. J.</i>	<i>Barnett</i>	<i>W. J. J.</i>	<i>W. J. J.</i>
DATE	8/12/91	8/12/91	8/12/91	8/12/91	8/13/91	8/13/91
U.S. EPA CONCURRENCES						OFFICIAL FILE COPY

program. Due to the recent penalties incurred for violations of its IEL for nitrogen calculated utilizing the 35% removal rate, StarKist may eliminate this program if the 35% removal rate is not rescinded to avoid future penalties.

Under the Order for Compliance, Section 4(e), the Administrative Order allows for adjusting StarKist's National Pollutant Discharge Elimination System (NPDES) permit's interim effluent limits for nitrogen and phosphorus at EPA's sole discretion after EPA reviewed the first three months of data after high-strength waste segregation. Our review of the data at that time did not compel us to change these limits. However, based on your request and our review of the monitoring data from August 1990 through May 1991 we are revising the interim effluent limits for nitrogen to utilize a DAF efficiency rate of 25%, a monthly average limit of 1675 lbs./day and a daily maximum limit of 2440 lbs./day (see below).

Our review of the data to date shows a definite trend over the 9 months since high-strength waste segregation of a decrease in StarKist's influent loadings, both in lbs. of nitrogen/day and lbs. of nitrogen/ton of fish processed. However, we cannot ascertain if there is a **direct correlation** between the decrease in loadings and the reduction in the DAF efficiency. Some of the data over the last three months show a few negative removal rates as well as some very low rates (below 15 percent) which significantly contributed to the monthly average and daily maximum effluent limit violations. It is also our observation that removal rates are not consistent; for example, influent loads ranging from 1400 lbs./day to 1600 lbs./day have shown removal rates of 4, 10, 34, 41, 50, 57 percent. Based on these inconsistencies, we question if the lower removal rates, especially the reported negative rates, are partially attributable to operational or sampling problems. We also note that Samoa Packing's influent loadings have decreased somewhat over the months, yet they are maintaining a constant removal rate of 74%. Based on the above observations, we feel that a modification of the interim effluent limits for nitrogen is warranted but not elimination of the DAF efficiency rate.

Thus, effective as of August 1, 1991, USEPA hereby modifies its Administrative Order issued on June 18, 1990 to StarKist Samoa, Inc. (Docket No. IX-FY90-22), by revising Section 3 of the Order for Compliance as follows (changes are in bold):

(a) Monthly Average of Total Nitrogen (lbs./day): The lesser of i) **1675** lbs/day, OR, ii) (Monthly Average Total Nitrogen Influent [lbs./day]) x **(0.75)**.

(b) Daily Maximum of Total Nitrogen (lbs./day): The lesser of: i) 2440 lbs./day, OR, ii (Daily Maximum Total Nitrogen Influent [lbs./day]) x (0.75).

The new fixed interim effluent limits were calculated using the standard deviations for the effluent data from August 1990 through May 1991. The new monthly average limit is one standard deviation plus the average of the monthly effluent averages. The new daily maximum limit is two standard deviations plus the average of the daily values.

The 25% efficiency rate is one standard deviation less than the average removal efficiency rate over the last five months, the average calculated by excluding removal rates below 10%.

The Administrative Order is also modified to add two additional conditions under Section 3 of the Order for Compliance as follows:

13. Respondent shall commence, as soon as possible, an analysis of its DAF process to assess and maximize its removal efficiency rate for both nitrogen and phosphorus. The results of this analysis shall be implemented as soon as possible and a report of this analysis and results of the implementation shall be submitted to EPA and ASEQC, in writing, no later than November 1, 1991.

14. No later than August 31, 1991, Respondent shall document its present nitrogen and phosphorus source reduction activities, providing information on the activities implemented, when implemented and future activities scheduled, and the effects of these activities on influent loadings.

Should you have any questions regarding the new interim effluent limits and conditions to the Administrative Order, please contact Pat Young at (415) 744-1591.

Sincerely,

Original Signed By

Harry Seraydarian
Director, Water Management Division

cc: Pati Faiiai, Director, ASEPA
Virginia Gibbons, AS Office of the Attorney General
American Samoa High Court
Norman Wei, StarKist Seafoods, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105

August 12, 1991

MEMORANDUM

SUBJECT: Recommendation for Revision of Interim Effluent Limits
For the EPA Administrative Order Issued to StarKist
Samoa, Inc.

FROM: Norman L. Lovelace, Chief (E-4) *nl*
Office of Pacific Island and Native American Programs

TO: Harry Seraydarian, Director (W-1)
Water Management Division

Attached is a letter to StarKist Samoa, Inc., a cannery located in American Samoa, which revises the interim effluent limits (IEL) for nitrogen. These IELs were established by USEPA's Administrative Order in June 1990. Our decision to review the existing IELs was prompted by recent requests from StarKist that we rescind the existing 35% removal efficiency requirement of the Dissolved Air Flotation (DAF) wastewater treatment system which is factored into calculation of the IELs. StarKist's request was prompted by its violations in 1991 of the monthly average IELs for the months of March, April and May, and daily maximum IELs for March and April. (The consent decree between the American Samoa government and StarKist, which parallels EPA's administrative order, assesses stipulated penalties for these violations.)

In correspondence and conversations with StarKist they maintained that their influent loadings had declined considerably since they began segregating and ocean disposal of their high strength fish waste, and that the DAF unit's removal efficiency decreases with the decreased loadings. They also maintained that the nitrogen in the influent was mostly soluble, thus the DAF unit could not consistently attain the 35% removal rate, since the DAF can remove non-soluble nitrogen more efficiently than soluble nitrogen. In addition, StarKist said they had implemented waste minimization activities at the plant in order to reduce influent loadings but may be forced to eliminate the program if the reduced loadings continued to impact the effluent limits such that more violations occur.

In consultation with the American Samoa Environmental Protection and the American Samoa Environmental Quality Commission, we recommend that EPA's administrative order be amended to adjust StarKist's fixed monthly average IEL from 1785 lbs/day to 1675 lbs/day, and daily maximum IEL for nitrogen from 2,645 lbs/day to 2,440 lbs./day. Additionally, we recommend the DAF efficiency rate be adjusted from 35% to 25%.

The new fixed interim effluent limits were calculated using the standard deviations for the effluent data from August 1990 through May 1991. The new monthly average limit is one standard deviation plus the average of the monthly effluent averages. The new daily maximum limit is two standard deviations plus the average of the daily values.

The 25% removal efficiency rate is one standard deviation less than the average removal efficiency rate (38%) over the last five months, the average calculated by excluding removal rates below 10% and negative percent removal efficiencies. These removal rates were considered statistical outliers for the calculation.

We are also recommending that the administrative order add two conditions requiring StarKist to assess and maximize their DAF unit's removal efficiency rate, and provide documentation of their waste minimization activities.

Our recommendations are based on an implied understanding between EPA and the canneries that we would review the monitoring data and adjust the IELs at our discretion if the data warranted such adjustment. The original IELs were based on limited and theoretical data, thus we felt it only fair that the real data be reviewed at a future date and adjustments made if necessary. After reviewing the recent data, while we cannot be certain that a direct correlation exists between the decreased influent loadings and decreased DAF efficiency rate, there does seem to be a trend toward decreases in loadings, which ultimately impacts favorably on the harbor's water quality. We feel that this positive impact, coupled with the canneries' commitment to build a longer outfall by March 1992 (at which time the IELs expire) would improve water quality over the long term, and thus justifies our recommendations. We also feel that these changes to the administrative order will encourage StarKist to continue their waste minimization activities, and compel them to operate the DAF unit as efficiently as possible.

Should you have any questions regarding this action, please contact Pat Young, American Samoa Program Manager, at 4-1591.

August 12, 1991

MEMORANDUM

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For the EPA Administrative Order Issued to StarKist
Samoa, Inc.

FROM: Norman L. Lovelace, Chief (E-4)
Office of Pacific Island and Native American Programs

TO: Harry Seraydarian, Director (W-1)
Water Management Division

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SYMBOL	E-4	E-4				
SURNAME	<i>pyam</i>	<i>Lee</i>				
DATE	8/12/91	8/12/91				
U.S. EPA CONCURRENCES			OFFICIAL FILE COPY			

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The new fixed interim effluent limits were calculated using the standard deviations for the effluent data from August 1990 through May 1991. The new monthly average limit is one standard deviation plus the average of the monthly effluent averages. The new daily maximum limit is two standard deviations plus the average of the daily values.

The 25% removal efficiency rate is one standard deviation less than the average removal efficiency rate (38%) over the last five months, the average calculated by excluding removal rates below 10% and negative percent removal efficiencies. These removal rates were considered statistical outliers for the calculation.

We are also recommending that the administrative order add two conditions requiring StarKist to assess and maximize their DAF unit's removal efficiency rate, and provide documentation of their waste minimization activities.

Our recommendations are based on an implied understanding between EPA and the canneries that we would review the monitoring data and adjust the IELs at our discretion if the data warranted such adjustment. The original IELs were based on limited and theoretical data, thus we felt it only fair that the real data be reviewed at a future date and adjustments made if necessary. After reviewing the recent data, while we cannot be certain that a direct correlation exists between the decreased influent loadings and decreased DAF efficiency rate, there does seem to be a trend toward decreases in loadings, which ultimately impacts favorably on the harbor's water quality. We feel that this positive impact, coupled with the canneries' commitment to build a longer outfall by March 1992 (at which time the IELs expire) would improve water quality over the long term, and thus justifies our recommendations. We also feel that these changes to the administrative order will encourage StarKist to continue their waste minimization activities, and compel them to operate the DAF unit as efficiently as possible.

Should you have any questions regarding this action, please contact Pat Young, American Samoa Program Manager, at 4-1591.

StarKist - Nitrogen Data 8/90-5/91 [7/24]

① Average of monthly averages: ~~2.91~~ 2.91
(lbs. effluent TN/ton tuna)

1 Standard deviation : .44

$$(2.91 + .44) \times 500 = \underline{\underline{1675}} \text{ proposed monthly average (av. + 1 SD)}$$

② Average of all daily maximum: 2.86
(lbs. effluent TN/ton tuna)

1 SD : 1.01

$$[2.86 + 2(1.01)] \times 500 = \underline{\underline{2440}} \text{ lbs/day proposed daily maximum}$$

③ Averaged removal rates Dec. → May (throw out low numbers) = 35%

Calculated SD for Dec → May = 18.64 (if throw out low # = 10.

$$35\% - 10\% = \underline{\underline{25\%}}$$

StarKist Seafood Company

Memorandum

9 JUL 1991 *SW*
Copy to Mike
NHm

DATE: 8 July, 1991
TO: Pat Young
US EPA Region 9
FROM: Norman Wei *NSW*
SUBJECT: Historical Data on Nitrogen Removal

Please find attached an XY-plot showing percent total nitrogen removal as a function of influent concentrations. The plot is based on actual data from StarKist Samoa covering a 28 month period from January 1989 to May 1991.

Taking into consideration the fact that over 75 percent of the nitrogen is generally in a soluble form as illustrated in my memo of July 1, 1991 to Mike Lee, we submit that it is not possible for the plant to achieve the 35 percent removal requirement on a consistent basis.

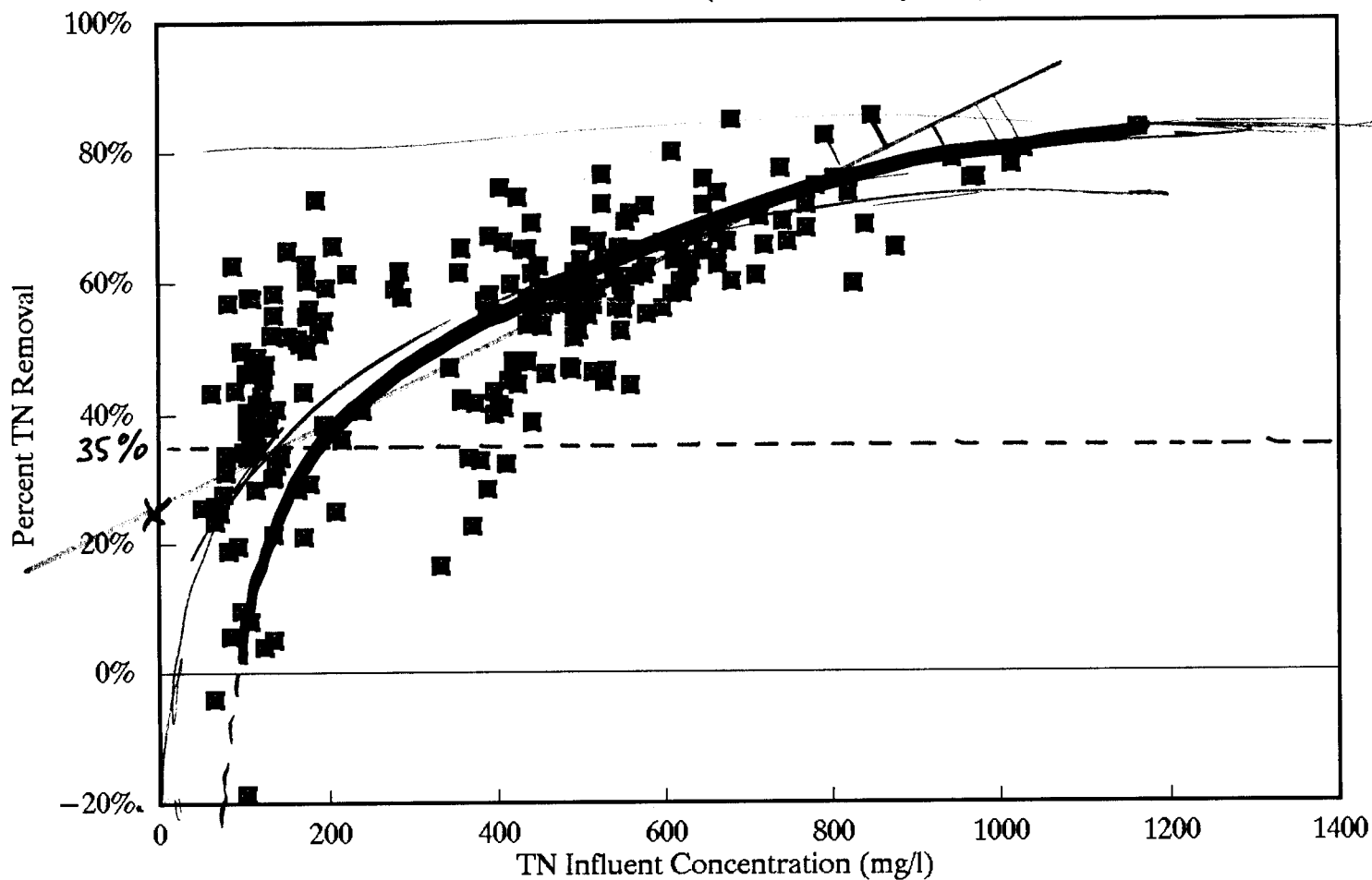
Please let me know if you need further information.

Attachment

cc: S. Wiegman - ASEPA
M. Callaghan
R. Ward

Percent TN Removal vs. TN Influent Conc.

StarKist Samoa (Jan 1989 – May 1991)



d:\samoa\TN%all



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
1235 MISSION STREET
SAN FRANCISCO, CA 94103

JUN 18 1990

CERTIFIED MAIL NO. P 057 506 656
RETURN RECEIPT REQUESTED

Mr. Maurice W. Callaghan
President and General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

Enclosed is an Administrative Order issued to the Star-Kist Samoa, Inc.'s tuna cannery by me under Section 309 of the Clean Water Act (the "Act") for violations of its National Pollutant Discharge Elimination System (NPDES) Permit No. AS0000019. Specifically, Star-Kist Samoa, Inc. has violated interim effluent limitations for total nitrogen through the failure to implement high strength waste segregation of its cannery effluent.

This Order, which is effective upon receipt, seeks to remedy the violations by requiring Star-Kist Samoa, Inc. to comply with the implementation of high strength waste segregation of its cannery effluent, as specified in the Order, and comply with newly established interim effluent limitations for total nitrogen and total phosphorus.

The Order also requires Star-Kist Samoa, Inc. to implement a three-month intensive monitoring program after implementation of high strength waste segregation and to submit reports on the results of the monitoring program. The intensive monitoring program requires the monitoring of several waste streams along with a requirement that monitoring reports be submitted no later than seven (7) days after the last day of each month in which data is collected. This reporting requirement presumes that the necessary laboratory analysis will be performed in American Samoa. If, for some reason, the laboratory analysis cannot be performed in American Samoa, then, based upon appropriate documentation submitted to EPA, reasonable extensions to the 7-day reporting requirement will be made. Based on the results of the monitoring program treatment plant removal efficiencies may be adjusted and interim effluent limitations changed in accordance with conditions specified in the Order.

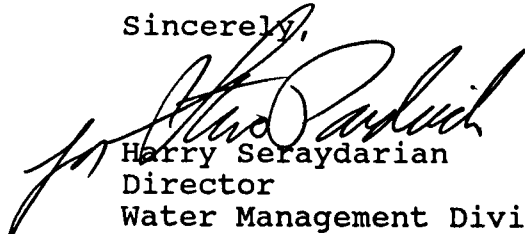
In addition, the Order establishes compliance dates for commencement and completion of an engineering study(s) by Star-Kist Samoa, Inc. to achieve compliance with water quality-based final effluent limitations of its NPDES permit. The Order also estab-

lishes compliance dates for completing its selected alternative and demonstrating compliance with final effluent limitations of the permit.

Any violations of the terms of the enclosed Order or violations of NPDES Permit No. AS0000019 could subject Star-Kist Samoa, Inc. to a civil action for appropriate relief pursuant to Section 309(b) and/or civil penalties under Section 309(d) or administrative penalties under Section 309(g) of the Act. In addition, Section 309(c) of the Act provides that negligent violations shall be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment for not more than one year, or both, and willful violations shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than three years, or both.

If you have any questions regarding this matter, please contact Mike Lee at (415)556-5059 or Pat Young (415)556-5069, Office of Pacific Island and Native American Programs, or Ann Nutt (415)556-5981, Office of Regional Counsel.

Sincerely,


Harry Seraydarian
Director
Water Management Division

Enclosure

cc: Pati Faiiai, ASEPA
V. Gibbons, AS OAG



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105

13 AUG 1991

Maurice W. Callaghan
General Manager
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Revision of Interim Effluent Limits for Nitrogen for
the EPA Administrative Order Issued to StarKist Samoa, Inc.

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- Your review of the influent and effluent data since high-strength waste segregation began in August of 1990 shows that the removal efficiency of the DAF cell for nitrogen decreases as the influent concentration decreases. The monthly average loadings for nitrogen has decreased substantially since August.
- Your analysis of the nitrogen shows that 66-76 percent of the influent nitrogen is in soluble form, thus you maintain that consistent attainment of the 35 percent removal rate is not possible with a DAF unit.
- StarKist is attempting to decrease its influent loadings through implementation of a source reduction

program. Due to the recent penalties incurred for violations of its IEL for nitrogen calculated utilizing the 35% removal rate, StarKist may eliminate this program if the 35% removal rate is not rescinded to avoid future penalties.

Under the Order for Compliance, Section 4(e), the Administrative Order allows for adjusting StarKist's National Pollutant Discharge Elimination System (NPDES) permit's interim effluent limits for nitrogen and phosphorus at EPA's sole discretion after EPA reviewed the first three months of data after high-strength waste segregation. Our review of the data at that time did not compel us to change these limits. However, based on your request and our review of the monitoring data from August 1990 through May 1991 we are revising the interim effluent limits for nitrogen to utilize a DAF efficiency rate of 25%, a monthly average limit of 1675 lbs./day and a daily maximum limit of 2440 lbs./day (see below).

Our review of the data to date shows a definite trend over the 9 months since high-strength waste segregation of a decrease in StarKist's influent loadings, both in lbs. of nitrogen/day and lbs. of nitrogen/ton of fish processed. However, we cannot ascertain if there is a **direct correlation** between the decrease in loadings and the reduction in the DAF efficiency. Some of the data over the last three months show a few negative removal rates as well as some very low rates (below 15 percent) which significantly contributed to the monthly average and daily maximum effluent limit violations. It is also our observation that removal rates are not consistent; for example, influent loads ranging from 1400 lbs./day to 1600 lbs./day have shown removal rates of 4, 10, 34, 41, 50, 57 percent. Based on these inconsistencies, we question if the lower removal rates, especially the reported negative rates, are partially attributable to operational or sampling problems. We also note that Samoa Packing's influent loadings have decreased somewhat over the months, yet they are maintaining a constant removal rate of 74%. Based on the above observations, we feel that a modification of the interim effluent limits for nitrogen is warranted but not elimination of the DAF efficiency rate.

Thus, effective as of August 1, 1991, USEPA hereby modifies its Administrative Order issued on June 18, 1990 to StarKist Samoa, Inc. (Docket No. IX-FY90-22), by revising Section 3 of the Order for Compliance as follows (changes are in bold):

(a) Monthly Average of Total Nitrogen (lbs./day): The lesser of i) **1675** lbs/day, OR, ii) (Monthly Average Total Nitrogen Influent [lbs./day]) x **(0.75)**.

(b) Daily Maximum of Total Nitrogen (lbs./day): The lesser of: i) 2440 lbs./day, OR, ii (Daily Maximum Total Nitrogen Influent [lbs./day]) x (0.75).

The new fixed interim effluent limits were calculated using the standard deviations for the effluent data from August 1990 through May 1991. The new monthly average limit is one standard deviation plus the average of the monthly effluent averages. The new daily maximum limit is two standard deviations plus the average of the daily values.

The 25% efficiency rate is one standard deviation less than the average removal efficiency rate over the last five months, the average calculated by excluding removal rates below 10%.

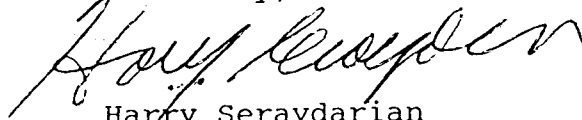
The Administrative Order is also modified to add two additional conditions under Section 3 of the Order for Compliance as follows:

13. Respondent shall commence, as soon as possible, an analysis of its DAF process to assess and maximize its removal efficiency rate for both nitrogen and phosphorus. The results of this analysis shall be implemented as soon as possible and a report of this analysis and results of the implementation shall be submitted to EPA and ASEQC, in writing, no later than November 1, 1991.

14. No later than August 31, 1991, Respondent shall document its present nitrogen and phosphorus source reduction activities, providing information on the activities implemented, when implemented and future activities scheduled, and the effects of these activities on influent loadings.

Should you have any questions regarding the new interim effluent limits and conditions to the Administrative Order, please contact Pat Young at (415) 744-1591.

Sincerely,



Harry Seraydarian
Director, Water Management Division

cc: Pati Faiai, Director, ASEPA
Virginia Gibbons, AS Office of the Attorney General
American Samoa High Court
Norman Wei, StarKist Seafoods, Inc.

11 FEB 1992

CERTIFIED MAIL NO. P 057 506 640
Return Receipt Requested

Maurice W. Callaghan
General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Amendment to Existing Administrative Order Allowing Use
of Newly Constructed Outfall

Dear Mr. Callaghan:

This is in reference to our Administrative Order, Docket No.
IX-FY90-22, issued to Star-Kist Samoa, Inc. on June 18, 1990.

In their January 23, 1992 letter, Jim Cox of Van Camp
Seafood Co., Inc. and Norman Wei, Star-Kist Seafood Company, re-
quested authorization for the canneries to test out and begin
discharging from the recently-constructed joint cannery outfall
in Pago Pago Harbor prior to formal issuance of VCS Samoa
Packing's and Star-Kist Samoa's new NPDES permits. These new
permits will allow for the discharge of cannery wastewater
through the new joint cannery outfall. Their letter also re-
quested that Star-Kist Samoa be allowed temporary use of its ex-
isting outfall (Outfall 001) in the event that problems develop
preventing the physical use of the new joint outfall.

Authorization is being requested to begin discharging from
the new outfall beginning on February 10, 1992. This is prior to
the March 7, 1992 deadline established by the existing Ad-
ministrative Order, by which Star-Kist's effluent is required to
meet the effluent limits based on American Samoa water quality
standards. In the event there are malfunctions with the new out-
fall and equipment, Star-Kist Samoa would like to maintain the
option of utilizing its existing outfall (Outfall 001) for dis-
charge of effluent until these problems with the new outfall can
be corrected.

During the development of these draft NPDES permits, U.S.
Environmental Protection Agency (USEPA) staff have been in close
communication with the canneries' staffs and consultants and with
the American Samoa Environmental Protection Agency (ASEPA) staff
to clarify and discuss our various concerns regarding the new

SYMBOL	E-4	E-4	RC-2-4	W-5-1	W-5-1	W-1
SURNAME	<i>pyoung</i>	<i>pyoung</i>	<i>Nutt</i>	<i>DiDion</i>	<i>IP</i>	<i>AS for HS</i>
DATE	<i>2/3/92</i>	<i>2/4/92</i>	<i>2/4/92</i>	<i>2/4/92</i>	<i>2/4/92</i>	<i>n Feb 92</i>

U.S. EPA CONCURRENCES
E-4/see
2/2/92

OFFICIAL FILE COPY

P 057 506 640

Maurice Callaghan
Star-Kist Samoa, Inc.
P.O. Box 368, Pago Pago, AS 96799

1

permits. Star-Kist Samoa's draft NPDES permit will soon be undergoing public review and comment, and at the earliest, is not anticipated to become effective until April.

Given the early completion of the new joint cannery outfall and that issuance of the new NPDES permit is not anticipated until April, after the existing NPDES permit's water quality compliance deadline, we have determined that early utilization of the new outfall is in the interest of improving the water quality of Pago Pago Harbor.

Based on the above considerations, the Order for Compliance Section of the Administrative Order, Docket No. IX-FY90-22, is hereby amended to include the following provisions:

15. Effective February 10, 1992, respondent is authorized to begin discharging effluent from the new joint cannery outfall. The initial period of discharge shall be for test purposes and shall be governed by the following paragraph.
16. For testing purposes, respondent shall notify ASEPA, USEPA and the American Samoa Attorney General (ASAG), 24 hours prior to commencing any discharge from the new joint cannery outfall for test purposes. Respondent shall also notify the above-mentioned parties 24 hours prior to cessation of testing operations. Respondent shall provide a written report within 10 days of completing testing operations. The report shall include, but not be limited to, duration of testing period, daily volume of discharge from the new joint outfall and/or discharge from the present outfall during the test period, and noted deficiencies and corrective actions taken and/or planned as a result of testing operations.
17. Twenty-four hours prior to start-up of regular discharge from the new joint outfall, respondent shall notify ASEPA, USEPA and ASAG in writing, of when it will begin utilizing the new joint outfall and cease discharging from its present outfall (Outfall 001). At the start-up of regular discharges from the new joint outfall, respondent will cease discharging from its present outfall (Outfall 001).
18. Discharge from the new joint outfall shall be subject to the effluent limitations, monitoring and reporting requirements as presented in Attachment 1, which is hereby incorporated into and made a part of this Order. Effluent limitations and monitoring and reporting requirements shall become effective upon the commencement of discharging from the new joint outfall. Except as stated in the Order for Com-

pliance, all other terms and conditions of respondent's present NPDES Permit, AS0000019, shall remain in effect until issuance of its new permit for the joint outfall.

19. For discharge from the new joint outfall, respondent shall submit a monthly report on the sampling and analyses identified in Attachment 1 by no later than the 15th day of the month following the month in which the samples were taken. This report shall be signed by a responsible company official certifying its accuracy.
20. Respondent is authorized to discharge effluent from its present outfall (Outfall 001) should problems develop with the new joint outfall which requires it being shut down for repair. Effluent from Outfall 001 is subject to terms and conditions of respondent's NPDES Permit No. AS0000019 and the terms of this Order and subsequent amendments. This authorization is effective as long as NPDES Permit No. AS0000019, as issued by EPA on February 3, 1987, is in effect, after which respondent must cease utilization of Outfall 001, seal the outfall with a blind flange and certify to ASEPA, USEPA and ASAG that this outfall has been effectively decommissioned. Such certification must be submitted within 30 days of the last effective day of NPDES Permit No. AS0000019.
22. Respondent shall notify ASEPA, USEPA and ASAG in writing, 24 hours in advance of when it intends to utilize the present outfall (Outfall 001) under situations outlined in Paragraph 20 above. Respondent shall detail the problems encountered, a schedule of repair, and when the new outfall will be back in service.
23. This Order shall expire upon the effective date of respondent's new NPDES permit for the joint outfall and upon written determination by EPA that the respondent has demonstrated, to the satisfaction of the ASEPA and USEPA, compliance with its water quality-based effluent limits and addressed all requirements of the Order. However, this Order may be modified if there are substantial delays before the new NPDES permit becomes effective.

Any violation of the terms of Order IX-FY90-22 as amended by this letter or any violation of Section 301(a) of the Act could subject Star-Kist Samoa, Inc. to a civil action for appropriate relief pursuant to Section 309(b) of the Act [33 U.S.C. Section 1319(d)] and/or civil penalties under Section 309(d) of the Act [33 U.S.C. Section 1319(d)]. In addition, Section 309(c)(1) of the Act [33 U.S.C. Section 1319(c)(1)] provides that a willful or

negligent violation shall be punished by a fine of not less than \$2,500 or more than \$25,000 per day of violation or imprisonment for not more than one year, or both.

If you have any questions in relation to this matter, please contact Pat Young at (415) 744-1591 or Doug Liden at (415) 744-1921.

Sincerely,

Harry Seraydarian
Director, Water Management Division

Attachment

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, ASAG
Jim Cox, Van Camp Seafood Co., Inc.
Norman Wei, StarKist Seafood Company
Steve Costa, CH2MHill

STAR-KIST SAMOA, INC.
EFFLUENT LIMITS AND MONITORING REQUIREMENTS FOR THE JOINT CANNERY OUTFALL

Effluent shall be sampled prior to its entry into the joint cannery outfall. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-DAY AVG.	DAILY MAX.	MEASUREMENT FREQUENCY	SAMPLE TYPE
FLOW (mgd)	---	2.9	Continuous	Recorder
SUSPENDED SOLIDS (lbs/day)	2653	6673	Twice/week	Composite
OIL AND GREASE (lbs/day)	675	1688	Twice/week	Grab (Calculated)
TOTAL PHOSPHORUS (lbs/day)	192	309	Twice/week*	Composite
TOTAL NITROGEN (lbs/day)	1200	2100	Twice/week*	Composite
TOTAL AMMONIA (mg/l)	--	133	Once/week	Composite
TEMPERATURE (F)	90	95	Continuous	Continuous
pH	---	**	Continuous	Grab

* Sampling is required twice/week on production days. Should the permittee wish to monitor the effluent on a nonproduction day(s), the permittee must monitor for the six consecutive days following the non-production day on which the first sample was taken. The average of all samples taken during that month will determine compliance with the "monthly average".

** The pH is limited between 6.5 and 8.6 standard units.

REPORTING: Discharge data obtained during the previous month shall be summarized and reported monthly and should be submitted no later than the 15th day of the following month.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

February 13, 1992

Norman Wei
Senior Manager
Environmental Engineering
Star-Kist Seafood Company
180 East Ocean Blvd.
Long Beach, CA 90802

Dear Mr. Wei:

This is in regard to your questions on the February 11, 1992 amendment to EPA's administrative order, which allows Star-Kist Samoa to test and utilize the new joint cannery outfall until issuance of the new NPDES permit for this outfall.

The sampling requirements for pH is stated in the amendment as being a grab sample and you pointed out that Star-Kist presently utilizes a recorder and that its present permit indicates the sampling type to be continuous. We have discussed your concerns and agree that the sampling type for pH should be continuous.

The oil and grease sampling method which is indicated as "grab (calculated)" should be done as indicated in the original administrative order, under the Order for Compliance Section, 4(c), as follows:


...each oil and grease sample shall consist of four individual grab samples ("sub-samples") which shall be taken at even intervals during each production period in which samples are taken. Each sub-sample shall be separately analyzed. The results of each sub-sample, and the mean value of the four sub-samples, shall be reported for daily maximum and monthly average (in mg./l).

This change in sampling methodology for oil and grease was to apply to oil and grease monitoring beyond the initial 90 days of required intensive monitoring after the effective date of the Order. You indicated that it was your understanding that this method was to be used only for the intensive monitoring regime and that Star-Kist went back to its previous sampling and analysis method for oil and grease after the 90-day intensive monitoring period. This method is analysis of a composite sample made up of individual samples taken every hour during a production period. We feel that this method is not acceptable due to the oil and grease which remain in the individual sampling bottles after the contents of these bottles are poured into a single container to make up the composite sample. We feel the method outlined above gives a more

accurate measure of oil and grease in the effluent over a production period and that this is the method that should be used for sampling and analysis of oil and grease. This sampling method will be included in the new permit.

Should you have any further questions, please give me a call.

Sincerely,



Pat Young
American Samoa Program Manager

cc: Maurice W. Callaghan, Star-Kist Samoa, Inc.
William Coleman, ASEQC
Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Virigina Gibbons, ASAG
Steve Costa, CH2MHill

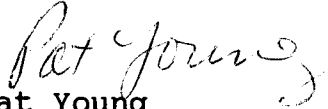
bc: Doug Liden, USEPA
Mike Lee, USEPA

-2-

accurate measure of oil and grease in the effluent over a production period and that this is the method that should be used for sampling and analysis of oil and grease. This sampling method will be included in the new permit.

Should you have any further questions, please give me a call.

Sincerely,



Pat Young
American Samoa Program Manager

cc: Maurice W. Callaghan, Star-Kist Samoa, Inc.
William Coleman, ASEQC
Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Virigina Gibbons, ASAG
Steve Costa, CH2MHill

bc: Doug Liden, USEPA
Mike Lee, USEPA

OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX NO: (415) 744-1604 FTS 484-1604
VERIFICATION NO: (415) 744-1599 FTS 484-1599

DATE: 2/13 PAGES: 3 (incl. cover)

TO:

Norman Wei / Maurice Callaghan

ORGANIZATION:

Star-Kist Samoa

9-1-02588-011-

FAX NO:

(684) 644-2440

PHONE NO:

SUBJECT:

Amended A/O - pH + O+G

FROM:

Pat Young

ORGANIZATION:

USEPA

PHONE NO:

(415) 744-1591

NOTE:

*** ACTIVITY REPORT ***

TRANSMISSION OK

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CONNECTION TEL	9102880116846442440
CONNECTION ID	
START TIME	02/13 15:39
USAGE TIME	01'22
PAGES	3
RESULT	OK

1 TAUTAI A. F. FA'ALEVAO
2 Attorney General
3 Virginia L. Gibbons
4 Assistant Attorney General
5 P. O. Box 7
6 Pago Pago, American Samoa 96799
7 Telephone: (684) 633-4163
8 FAX: (684) 633-1838

9 Attorneys for Plaintiff
10 American Samoa Government

11
12 IN THE HIGH COURT OF AMERICAN SAMOA
13 TRIAL DIVISION

14 AMERICAN SAMOA GOVERNMENT,

15 Plaintiff,

16 vs.

17 STARKIST SAMOA, INC.,

18 Defendant.

C. A. No. 65-90

19 AMERICAN SAMOA GOVERNMENT,

20 Plaintiff,

21 vs.

22 VCS SAMOA PACING COMPANY,

23 Defendant.

C. A. No. 66-90

24 REPORT TO THE COURT ON THE STATUS OF COMPLIANCE

25 Plaintiff AMERICAN SAMOA GOVERNMENT (ASG) herewith
submits its second report to the Court on the status of
compliance with the decrees filed in the above captioned

1 actions, pursuant to the Court's Opinion and Order of August 3,
2 1990.

3 Respectfully submitted, this 13th day of March, 1991.

4 TAUTAI A. F. FAALEVAO
5 ATTORNEY GENERAL

6 By:

7 Virginia L. Gibbons
8 Virginia L. Gibbons
9 Assistant Attorney General

10 Report to the Court on the Status of Compliance, ASG v.
11 Starkist Samoa, Inc., C.A. 65-90; ASG v. VCS Samoa Packing Co.,
12 C.A. 66-90.

ASG v. STAR KIST SAMOA, INC., C.A. No. 65-90

ASG v. VCS SAMOA PACKING CO., C. A. No. 66-90

REPORT No.2 to the HIGH COURT
on the
STATUS OF COMPLIANCE WITH CONSENT JUDGMENTS

Plaintiff American Samoa Government (hereinafter "ASG") brought the above-captioned actions for injunctive relief and assessment of penalties against defendants on June 20, 1990. On June 22, 1990, the parties submitted consent agreements to the High Court for approval. These agreements were entered as judgments of the High Court on August 3, 1990, with the condition that the ASG submit periodic reports of compliance. Plaintiff submitted the first required report to the Court in November, 1990. This is the second report, covering the period November, 1990 through January, 1991.

Compliance by both defendants continues to be satisfactory. Both canneries continue to operate "high strength waste segregation" and both have commenced the engineering feasibility study necessary to determine a method to meet territorial Water Quality Standards. Routine analyses of water quality in Pago Pago Harbor, conducted by the government, continue to show a decrease in levels of total nitrogen and total phosphorous proportional to the amount removed via "high strength waste segregation."

It appears that the two canneries may be cooperating with each other to solve the long range problem of meeting water quality standards by 1992. Both canneries have consulted with local agencies regarding installation of a single outfall to be built jointly by the two defendants.

1. Star Kist Samoa, Inc.

Starkist submitted all required reports concerning effluent limitations in a timely fashion during this reporting period. Interim effluent limitations were met for the period.

Data from the previous reporting period indicated that Star Kist had exceeded a monthly average effluent limitation for the month of August, 1990. The Environmental Quality Commission (EQC) had earlier agreed to review monitoring data from Star Kist for a three-month period to determine whether or not a violation of the monthly average limitation had indeed occurred. The EQC met on February 5, 1991 and reviewed the monitoring data over the three-month period from August through October, 1990. The EQC officials found that

the operational difficulties experienced by Star Kist during the first month of high strength waste segregation did not in fact constitute a violation of the monthly average interim effluent limitation.

It was determined, however, that Star Kist had violated a daily maximum limitation for total nitrogen on October 12, 1990, and that the stipulated penalty of \$1,000 should be paid. (Permitted level was 1713 lb/day; discharge on 10/12/90 was 1862 lb.)

Star Kist is continuing to acquire information and complete analyses necessary for the engineering feasibility study, which is required to be finalized by March 30, 1991, according to the compliance schedule contained within the consent decree. Staff from the firm "CH2M Hill" were on island in December, 1990 to collect information. A brief progress report on the study was submitted to the territorial E.P.A. A more detailed briefing will be scheduled to coincide with the deadline for the completion of the study.

Star Kist paid its initial fine installment of \$70,000 and its second and third installments of \$40,000 in a timely fashion as required by Appendix B to the consent agreement. Thus, the penalty for past violations of \$150,000 has been paid in full.

2. VCS Samoa Packing Company

All reports concerning compliance with interim effluent limitations were submitted as required for the reporting period. Samoa Packing exceeded a daily maximum effluent limitation for phosphorus on November 21, 1990 (permitted level was 260 lb/day; discharge for 11/21/90 was 267 lbs), and promptly paid the required stipulated penalty of \$1000.

Samoa Packing has made further progress on the required engineering feasibility study to assess the viable alternatives for achievement of Water Quality Standards. A draft final report has been prepared and a detailed briefing will be provided by the company by the end of the month.

Samoa Packing made its initial payment of \$50,000 and its second and third payments of \$25,000 in a timely fashion as required by Appendix B of the consent decree. Thus, the total penalty for past violations of \$100,000 assessed against Samoa Packing has been paid in full.

Both defendants appear to be operating their present systems of waste segregation in a satisfactory manner and are

demonstrating good faith in working together towards an engineering solution that will enable them to meet American Samoa Water Quality Standards pursuant to the terms of the consent decrees.

The information provided in this report was supplied by the defendants and the American Samoa Environmental Protection Agency.

- end -



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

11 FEB 1992

CERTIFIED MAIL NO. P 057 506 640
Return Receipt Requested

Maurice W. Callaghan
General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Re: Amendment to Existing Administrative Order Allowing Use
of Newly Constructed Outfall

Dear Mr. Callaghan:

This is in reference to our Administrative Order, Docket No.
IX-FY90-22, issued to Star-Kist Samoa, Inc. on June 18, 1990.

In their January 23, 1992 letter, Jim Cox of Van Camp Seafood Co., Inc. and Norman Wei, Star-Kist Seafood Company, requested authorization for the canneries to test out and begin discharging from the recently-constructed joint cannery outfall in Pago Pago Harbor prior to formal issuance of VCS Samoa Packing's and Star-Kist Samoa's new NPDES permits. These new permits will allow for the discharge of cannery wastewater through the new joint cannery outfall. Their letter also requested that Star-Kist Samoa be allowed temporary use of its existing outfall (Outfall 001) in the event that problems develop preventing the physical use of the new joint outfall.

Authorization is being requested to begin discharging from the new outfall beginning on February 10, 1992. This is prior to the March 7, 1992 deadline established by the existing Administrative Order, by which Star-Kist's effluent is required to meet the effluent limits based on American Samoa water quality standards. In the event there are malfunctions with the new outfall and equipment, Star-Kist Samoa would like to maintain the option of utilizing its existing outfall (Outfall 001) for discharge of effluent until these problems with the new outfall can be corrected.

During the development of these draft NPDES permits, U.S. Environmental Protection Agency (USEPA) staff have been in close communication with the canneries' staffs and consultants and with the American Samoa Environmental Protection Agency (ASEPA) staff to clarify and discuss our various concerns regarding the new

permits. Star-Kist Samoa's draft NPDES permit will soon be undergoing public review and comment, and at the earliest, is not anticipated to become effective until April.

Given the early completion of the new joint cannery outfall and that issuance of the new NPDES permit is not anticipated until April, after the existing NPDES permit's water quality compliance deadline, we have determined that early utilization of the new outfall is in the interest of improving the water quality of Pago Pago Harbor.

Based on the above considerations, the Order for Compliance Section of the Administrative Order, Docket No. IX-FY90-22, is hereby amended to include the following provisions:

15. Effective February 10, 1992, respondent is authorized to begin discharging effluent from the new joint cannery outfall. The initial period of discharge shall be for test purposes and shall be governed by the following paragraph.
16. For testing purposes, respondent shall notify ASEPA, USEPA and the American Samoa Attorney General (ASAG), 24 hours prior to commencing any discharge from the new joint cannery outfall for test purposes. Respondent shall also notify the above-mentioned parties 24 hours prior to cessation of testing operations. Respondent shall provide a written report within 10 days of completing testing operations. The report shall include, but not be limited to, duration of testing period, daily volume of discharge from the new joint outfall and/or discharge from the present outfall during the test period, and noted deficiencies and corrective actions taken and/or planned as a result of testing operations.
17. Twenty-four hours prior to start-up of regular discharge from the new joint outfall, respondent shall notify ASEPA, USEPA and ASAG in writing, of when it will begin utilizing the new joint outfall and cease discharging from its present outfall (Outfall 001). At the start-up of regular discharges from the new joint outfall, respondent will cease discharging from its present outfall (Outfall 001).
18. Discharge from the new joint outfall shall be subject to the effluent limitations, monitoring and reporting requirements as presented in Attachment 1, which is hereby incorporated into and made a part of this Order. Effluent limitations and monitoring and reporting requirements shall become effective upon the commencement of discharging from the new joint outfall. Except as stated in the Order for Com-

pliance, all other terms and conditions of respondent's present NPDES Permit, AS0000019, shall remain in effect until issuance of its new permit for the joint outfall.

19. For discharge from the new joint outfall, respondent shall submit a monthly report on the sampling and analyses identified in Attachment 1 by no later than the 15th day of the month following the month in which the samples were taken. This report shall be signed by a responsible company official certifying its accuracy.
20. Respondent is authorized to discharge effluent from its present outfall (Outfall 001) should problems develop with the new joint outfall which requires it being shut down for repair. Effluent from Outfall 001 is subject to terms and conditions of respondent's NPDES Permit No. AS0000019 and the terms of this Order and subsequent amendments. This authorization is effective as long as NPDES Permit No. AS0000019, as issued by EPA on February 3, 1987, is in effect, after which respondent must cease utilization of Outfall 001, seal the outfall with a blind flange and certify to ASEPA, USEPA and ASAG that this outfall has been effectively decommissioned. Such certification must be submitted within 30 days of the last effective day of NPDES Permit No. AS0000019.
22. Respondent shall notify ASEPA, USEPA and ASAG in writing, 24 hours in advance of when it intends to utilize the present outfall (Outfall 001) under situations outlined in Paragraph 20 above. Respondent shall detail the problems encountered, a schedule of repair, and when the new outfall will be back in service.
23. This Order shall expire upon the effective date of respondent's new NPDES permit for the joint outfall and upon written determination by EPA that the respondent has demonstrated, to the satisfaction of the ASEPA and USEPA, compliance with its water quality-based effluent limits and addressed all requirements of the Order. However, this Order may be modified if there are substantial delays before the new NPDES permit becomes effective.

Any violation of the terms of Order IX-FY90-22 as amended by this letter or any violation of Section 301(a) of the Act could subject Star-Kist Samoa, Inc. to a civil action for appropriate relief pursuant to Section 309(b) of the Act [33 U.S.C. Section 1319(d)] and/or civil penalties under Section 309(d) of the Act [33 U.S.C. Section 1319(d)]. In addition, Section 309(c)(1) of the Act [33 U.S.C. Section 1319(c)(1)] provides that a willful or

negligent violation shall be punished by a fine of not less than \$2,500 or more than \$25,000 per day of violation or imprisonment for not more than one year, or both.

If you have any questions in relation to this matter, please contact Pat Young at (415) 744-1591 or Doug Liden at (415) 744-1921.

Sincerely,

Alejo Strauss
for Harry Seraydarian
Director, Water Management Division

Attachment

cc: William Coleman, ASEQC
Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, ASAG
Jim Cox, Van Camp Seafood Co., Inc.
Norman Wei, StarKist Seafood Company
Steve Costa, CH2MHill

STAR-KIST SAMOA, INC.
EFFLUENT LIMITS AND MONITORING REQUIREMENTS FOR THE JOINT CANNERY OUTFALL

Effluent shall be sampled prior to its entry into the joint cannery outfall. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-DAY AVG.	DAILY MAX.	MEASUREMENT FREQUENCY	SAMPLE TYPE
FLOW (mgd)	---	2.9	Continuous	Recorder
SUSPENDED SOLIDS (lbs/day)	2653	6673	Twice/week	Composite
OIL AND GREASE (lbs/day)	675	1688	Twice/week	Grab (Calculated)
TOTAL PHOSPHORUS (lbs/day)	192	309	Twice/week*	Composite
TOTAL NITROGEN (lbs/day)	1200	2100	Twice/week*	Composite
TOTAL AMMONIA (mg/l)	--	133	Once/week	Composite
TEMPERATURE (F)	90	95	Continuous	Continuous
pH	---	**	Continuous	Grab

* Sampling is required twice/week on production days. Should the permittee wish to monitor the effluent on a non-production day(s), the permittee must monitor for the six consecutive days following the non-production day on which the first sample was taken. The average of all samples taken during that month will determine compliance with the "monthly average".

** The pH is limited between 6.5 and 8.6 standard units.

REPORTING: Discharge data obtained during the previous month shall be summarized and reported monthly and should be submitted no later than the 15th day of the following month.

January 23, 1992

Pat Young
American Samoa Program Manager (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Pat:

The canneries (StarKist Samoa, Inc. and Samoa Packing) are planning to commence pumping their treated effluent through the newly installed joint marine pipeline during the week of February 10th. This mode of discharge will continue through to March 7th and beyond unless there are mechanical problems with the pumping system in which case the existing outfalls will be utilized until the problem is corrected.

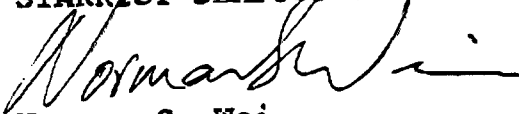
In view of the fact that the NPDES permits will not likely be issued in time for the March 7, 1992 deadline, the canneries hereby request permission to test out and utilize the new pipeline system starting the week of February 10, 1992.

The canneries understand that the proposed new NPDES limits will be in effect when the new pipeline is used. The existing interim limits will apply when the existing outfalls are utilized.

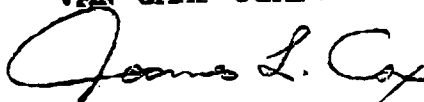
We thank you for your assistance in helping to expedite this matter.

Sincerely,

STARKIST SEAFOOD COMPANY


Norman S. Wei
Senior Manager
Environmental Engineering

VAN CAMP SEAFOOD CO., INC.


James L. Cox
Director
Engineering and Environmental Affairs

cc: M. Macready - Samoa Packing
M. Callahan - StarKist Samoa, Inc.

1055

6/22/90

IN THE HIGH COURT OF AMERICAN SAMOA

TRIAL DIVISION

AMERICAN SAMOA GOVERNMENT,) C. A. No. 65 -90
Plaintiff,)
vs.)
STARKIST SAMOA, INCORPORATED,)
Defendant.)

CONSENT DECREE

WHEREAS the above-captioned complaint was brought by plaintiff American Samoa Government (ASG) against defendant STARKIST SAMOA, INC., on June 20, 1990; and

WHEREAS plaintiff ASG contends in its complaint that defendant has violated the American Samoa Environmental Quality Act, section 24.0107, American Samoa Code Annotated (ASCA) and the regulations promulgated thereunder, relating to the American Samoa Water Quality Standards, section 24.0206, American Samoa Administrative Code (ASAC), by exceeding the permitted levels for discharge of nitrogen and phosphorus into Pago Pago Harbor; and

WHEREAS plaintiff and defendant desire to avoid the perils of litigation and to resolve the controversy between them; and

WHEREAS it is the intent of defendant to use its best efforts in good faith to achieve and maintain full compliance with the American Samoa Environmental Quality Act and the

1 regulations promulgated thereunder, including all applicable
2 American Samoa Water Quality Standards at the earliest
3 practicable time;

4 NOW, THEREFORE, upon the pleading and upon consent of
5 the parties thereto, it is hereby ORDERED, ADJUDGED AND
6 DECREED as follows:

7 I.

8 JURISDICTION

9 This Court has jurisdiction of the subject matter and
10 the parties consenting hereto for the purpose of entering
11 this consent decree. The complaint states a claim upon which
12 relief may be granted against the defendant pursuant to
13 24.0107, 24.0167, 24.0169, and 43.1302, ASCA and under the
14 American Samoa Water Quality Standards, 24.0206, ASAC.

15 II.

16 BINDING EFFECT

17 The provisions of this consent decree shall apply to and
18 be binding upon the parties hereto, their respective elected
19 and appointed officials, officers, directors, agents,
20 servants, employees, successors, assigns, and attorneys, and
21 upon all those persons, firms, and corporations acting under,
22 through or for them, and upon those persons, firms and
23 corporations in active concert or participation with them.
24
25

III.

AGREEMENT COMPLETE; COMPLIANCE WITH APPLICABLE LAWS

A. Plaintiff ASG filed the complaint herein on June, 1990, alleging that defendant had violated the American Samoa Environmental Quality Act, 24.0107, ASCA and the regulations promulgated thereunder relating to Water Quality Standards in Pago Pago Harbor, 24.0206, ASAC. Plaintiff requested a permanent injunction and penalties of \$500 per day, per violation, for past infractions. Defendant neither admits nor denies the allegations of this complaint.

B. This consent decree constitutes a full and complete settlement of all claims which were presented against defendant under the laws of American Samoa in the complaint filed in this case up to and including the date of entry of this decree.

C. This consent decree is not and shall not be interpreted to be a permit, or a modification of an existing permit, under either territorial or federal environmental laws.

D. Defendant shall comply with the terms and conditions of all applicable territorial laws and any existing or future regulations and/or permits issued thereunder, including all monitoring and reporting requirements, PROVIDED HOWEVER, that insofar as this consent decree establishes a compliance schedule which is inconsistent with any permit, plaintiff ASG

1 will seek no penalties other than those provided in this
2 decree for the duration of the compliance schedule.

3 E. For purposes of this consent decree, the terms
4 "achievement of . . . " or "compliance with . . . " or
5 "achieve American Samoa Water Quality Standards" shall mean
6 compliance with the nitrogen and phosphorus limitations
7 contained within defendant's National Pollutant Discharge
8 Elimination System (NPDES) permit (#AS0000019) issued under
9 the authority of section 402 of the Federal Water Pollution
10 Control Act, 33 U.S.C 1342.

11 F. Plaintiff ASG, pursuant to the current "Enforcement
12 Agreement" between the American Samoa Environmental Quality
13 Commission and the U. S. Environmental Protection Agency,
14 agrees to request the federal government to issue an
15 Administrative Order pursuant to Section 309(a) of the
16 Federal Water Pollution Control Act, 33 U.S.C. 1319(a), which
17 adopts the compliance schedule contained in section IV of
18 this consent decree, including the interim discharge
19 limitations for nitrogen and phosphorus related to
20 defendant's fish wastewater discharge activities in Pago Pago
21 Harbor and waters surrounding the Island of Tutuila.

22 IV.

23 REMEDIAL ACTIONS

24 A. Defendant shall immediately commence a series of
25 actions leading to attainment and thereafter continued

1 compliance with the Environmental Quality Act, 24.0107 and
2 24.0167 ASAC, and the regulations promulgated thereunder,
3 relating to the American Samoa Water Quality Standards for
4 nitrogen and phosphorus, 24.0206 ASAC. These actions shall
5 be undertaken successively and shall be completed by the
6 dates set forth below.

7 B. Compliance Schedule

8 1. (a) Defendant shall obtain and install the
9 necessary equipment for and implement a system that shall be
10 termed "high strength waste segregation." This system shall
11 be designed and so operate to remove and segregate all
12 dissolved air flotation sludge, press water, and pre-cooker
13 juice (i.e., those wastes which are high in nitrogen and
14 phosphorus) from present cannery effluent for disposal
15 outside Pago Pago Harbor at sea. Such system shall commence
16 operations by July 31, 1990 and run continuously for the
17 duration of this consent decree.

18 (b) Defendant shall also:

19 (i) obtain the necessary federal Ocean Dumping
20 Permit to dispose of such high strength waste,
21 and

22 (ii) secure adequate barge capacity to
23 transport said high strength wastes to the approved ocean
24 dump site, as identified in 55 Federal Register 3948
25 (February 6, 1990).

1 (c) Deadline for commencement of barging of high
2 strength wastes shall be July 31, 1990.

3 2. Not later than August 1, 1990, defendant shall
4 achieve and thereafter maintain compliance with the interim
5 effluent limitations for nitrogen and phosphorus for Pago
6 Pago Harbor set forth in Appendix A, attached hereto and
7 incorporated herein.

8 3. (a) Defendant shall undertake an engineering
9 feasibility study or studies to assess the viable and
10 potentially feasible alternatives for achievement of American
11 Samoa Water Quality Standards.

12 (b) Such study(ies) shall begin as soon as
13 possible, and may include examination of promising
14 alternatives identified in previous studies funded through
15 the Joint Cannery Trust Fund and the Waste Load Allocation
16 Study recently conducted for the American Samoa Government.

17 (c) Defendant shall provide interim written status
18 reports to the Environmental Quality Commission/ American
19 Samoa Environmental Protection Agency regarding the progress
20 and findings of the study(ies) as such information becomes
21 available, but no less often than once every three months.

22 (d) Deadline for completion of engineering
23 feasibility study(ies) shall be March 31, 1991.

24 4. (a) Defendant, based on all the information
25 available to it, including the results of the above-described

1 engineering feasibility study(ies), shall select from among
2 the alternatives available, a method or combination of
3 methods of achieving compliance with American Samoa Water
4 Quality Standards or elect to terminate its operations in
5 American Samoa.

6 (b) No later than May 31, 1991, defendant shall
7 notify in writing, the Court, the Governor's Office, the
8 Office of the Attorney General, and the Environmental Quality
9 Commission/ American Samoa Environmental Protection Agency,
10 and the U. S. Environmental Protection Agency of its selected
11 method or combination of methods for achieving compliance
12 with American Samoa Water Quality Standards (the "selected
13 alternative") which may include its election to terminate
14 operations in American Samoa.

15 5. (a) Defendant shall take all actions necessary to
16 implement the selected alternative.

17 (b) Defendant shall be responsible for obtaining
18 all necessary rights of way and land use or other permits,
19 and for assuring that any construction conforms with accepted
20 engineering practices and requirements under the laws, rules
21 and regulations of American Samoa and of the United States.
22 Plaintiff, while taking into account territorial land use and
23 coastal management policies, shall, if appropriate, provide
24 rights of way along main roads or within other public
25 property for construction or installation of the selected

1 alternative.

2 (c) Defendant shall complete all actions necessary
3 to meet the American Samoa Water Quality Standards under the
4 selected alternative, which may include termination of its
5 operations in American Samoa, no later than March 5, 1992.

6 6. (a) Defendant shall implement, operate and maintain
7 its selected alternative such that it achieves and maintains
8 compliance with American Samoa Water Quality Standards.

9 (b) Deadline for compliance with American Samoa
10 Water Quality Standards shall be March 7, 1992 unless
11 defendant has terminated its operations in American Samoa
12 prior to such date.

13 V.

14 STIPULATED PENALTIES

15 Defendant agrees to pay stipulated penalties for
16 violation of any of the obligations set forth in this consent
17 decree, as follows:

18 A. Failure to commence barging of high strength wastes
19 by July 31, 1990, and to continuously barge said wastes at
20 all times thereafter for the duration of this consent decree:

<u>Period of Failure to Comply</u>		<u>Penalty</u>
1 - 30 days	-	\$1,000 per day
31 - 45 days	-	\$5,000 per day
After 45 days	-	\$10,000 per day

25 /////

1 B. Failure to achieve each of the interim effluent
2 limitations, as prescribed in Appendix A, (subject to the
3 "bypass" provisions of part II, A. 3 of defendant's National
4 Pollutant Discharge Elimination System permit) commencing on
5 August 1, 1990:

6 Period of Failure to Comply
7 with Daily Maximum Limitation

Penalty

1 - 30 days	\$1000 per day per violation
31 - 60 days	2000 per day per violation
After 60 days	3000 per day per violation

10 Period of Failure to Comply
11 with Monthly Average Limitation

Penalty

1st month	\$10,000 per monthly violation
2nd month	15,000 per monthly violation
3rd month or more	20,000 per monthly violation

15 C. Failure to complete engineering feasibility study
16 (ies) by March 31, 1991:

18 Period of Failure to Comply

Penalty

1 - 30 days	-	- \$0 -
31 - 60 days	-	\$500 per day
After 60 days	-	\$1,000 per day

22 D. Failure to submit, by May 31, 1991, written notice
23 of the selected alternative to meet American Samoa Water
24 Quality Standards which may include defendant's election to
25 terminate operations in American Samoa:

Period of Failure to Comply

Penalty

1 - 30 days	-	- \$0 -
31 - 60 days	-	\$500 per day
After 60 days	-	\$1,000 per day

E. Failure to complete the selected alternative to achieve American Samoa Water Quality Standards, which may include defendant's termination of operations in American Samoa, by March 5, 1992:

Period of Failure to Comply

Penalty

1 - 15 days	-	- \$0 -
16 - 30 days	-	\$1,000 per day
31 - 45 days	-	\$5,000 per day
After 45 days	-	\$10,000 per day

F. Failure to achieve compliance with American Samoa Water Quality Standards by March 7, 1992 unless defendant has terminated its operations in American Samoa prior to such date: \$500 per day, per violation, until compliance is achieved (subject to the "bypass" provisions of Part II. A, paragraph 3 of defendant's National Pollutant Discharge Elimination System permit).

G. Accrual of stipulated civil penalty liability pursuant to "A" through "F" above, shall be cumulative in all instances for the duration of this consent decree.

H. Any stipulated penalties incurred by defendant shall be paid without demand by defendant's check, made payable to

1 "American Samoa Government," to be tendered to the Office of
2 the Attorney General at Fagatogo, American Samoa by the 30th
3 day of the month following the month in which the deadline
4 was missed or the limitation was exceeded.

5 VI.

6 PENALTY FOR PAST VIOLATIONS

7 Defendant shall pay to plaintiff ASG a civil penalty in
8 the amount of \$150,000 (in accordance with the payment terms
9 specified in Appendix B, attached hereto and incorporated
10 herein) in full settlement of the claims alleged in
11 plaintiff's complaint. Each payment shall be made in the
12 form of defendant's check payable to the "American Samoa
13 Government," and shall be tendered to the Office of the
14 Attorney General, Fagatogo, American Samoa.

15 VII.

16 FORCE MAJEURE

17 A. Defendant's noncompliance with one or more of the
18 provisions of this consent decree may be excused only to the
19 extent and for the duration that noncompliance is caused by a
20 "force majeure" event. For the purposes of this consent
21 decree, "force majeure" is defined as an event entirely
22 beyond the control of the defendant and any entity controlled
23 by defendant, including defendant's employees, consultants
24 and contractors--including barge contractors--that defendant
25 could not have foreseen and prevented by due diligence, and

1 that makes compliance with the applicable provision or
2 provisions of this consent decree impossible. Examples of
3 force majeure events include, but are not limited to acts of
4 God, war, riots, strikes, embargoes or other import and
5 export restrictions, fires, floods, tidal waves, typhoons,
6 explosions, earthquakes or other severe weather conditions or
7 catastrophes, inability to obtain or transport equipment or
8 material due to operation of governmental priorities,
9 preferences, or allocations, and quarantine.

10 B. The parties agree that the following shall not
11 constitute a "force majeure" event under this consent decree:

12 (1) Failure to apply standard engineering practices
13 in the design, construction, or operation of any wastewater
14 treatment facility operated by defendant;

15 (2) Operational error or careless or negligent
16 operations of any wastewater treatment facility operated or
17 to be constructed and operated by defendant;

18 (3) Failure of defendant to adopt or adhere to a
19 program of preventive maintenance consistent with standard
20 operational practices;

21 (4) Inability of defendant to secure financing to
22 perform any act required by this consent decree, or
23 unexpected costs relating to activities required herein; and

24 (5) Failure of defendant to obtain any ocean
25 dumping permit or other permit, license, or authorization

1 necessary to perform any act required by this consent decree.

2 C. If any event occurs which causes or may cause
3 defendant to violate any provision of this consent decree,
4 defendant shall so notify the Court, the Office of the
5 Attorney General, and the Environmental Quality Commission/
6 American Samoa Environmental Protection Agency in writing
7 within ten (10) days or as soon as possible thereafter of the
8 event. The notice shall specifically describe the impact of
9 the event, provide a summary of the reasons for or
10 explanation regarding the event, the anticipated length of
11 time of non-compliance, the measures to be taken to prevent
12 or minimize the impact of the event, and the proposed new
13 timetable for compliance. Failure to make the notice herein
14 called for shall render defendant's claim of "force majeure"
15 void and of no effect.

16 D. If plaintiff agrees that noncompliance with this
17 decree has been or will be caused by "force majeure" events
18 entirely out of the control of defendant, including
19 defendant's consultants and contractors, and that defendant
20 could not have foreseen and prevented such noncompliance, the
21 time for performance of such requirement shall be extended
22 for a period not to exceed the actual delay, and stipulated
23 penalties shall not be due for said delay.

24 E. If plaintiff does not agree that noncompliance was
25 caused by a "force majeure" event, defendant may apply to the

1 Court pursuant to the provisions of section VIII, Dispute
2 Resolution, below.

3 VIII.

4 DISPUTE RESOLUTION

5 In the event the parties are unable to agree upon any
6 plan, procedure, standard, requirement, or other matter
7 described herein, or in the event a dispute should arise
8 regarding implementation of the requirements of this consent
9 decree, or the compliance schedule herein, the defendant
10 shall comply with the position of plaintiff ASG and may file
11 a petition with the Court for resolution of the dispute.
12 Plaintiff ASG shall have thirty (30) days to file a response
13 with an alternate proposal for resolution. In any dispute,
14 the defendant shall have the burden of proving by clear and
15 convincing evidence that its proposal most appropriately
16 fulfills the terms, conditions, requirements, and objectives
17 of this decree, and will achieve compliance with American
18 Samoa Water Quality Standards at the earliest possible date.

19 IX.

20 RIGHT OF ENTRY

21 A. At all reasonable times until the date upon which
22 this decree terminates by order of the Court, any duly
23 authorized representative, contractor or consultant of
24 plaintiff ASG shall have the authority to enter any facility
25 or site operated by defendant in American Samoa, and upon

proper presentation credentials, may:

- (1) monitor the progress of activities required by this consent decree; and
- (2) verify any data, and the presence and/or operation of any equipment related to the requirements of this decree.

B. Nothing herein shall limit the right of entry and access of plaintiff ASG, or the federal government under all existing and applicable laws, rules, and regulations.

X.

WATER QUALITY STANDARDS REVIEW

Plaintiff, in its sole discretion, may reexamine its water quality standards at any time during the duration of this consent decree upon receipt of substantial evidence that may justify such action.

XI.

COSTS OF SUIT

Each party shall bear its own costs and attorneys' fees in this action.

XII.

MODIFICATION

Except as expressly provided herein, there shall be no modification of this consent decree without the written approval of the parties and the Court.

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XIII.

CONTINUING JURISDICTION OF THE COURT

Until this consent decree is terminated, the Court shall retain jurisdiction to enforce the terms and conditions herein and to resolve disputes arising hereunder as may be necessary or appropriate.

XIV.

COUNTERPARTS

This consent decree may be executed in two (2) or more counterparts, each of which shall be an original, and all of which shall constitute one and the same instrument. Until this decree is executed by each and every party to this decree, it shall not be binding upon any of the parties. This decree, when executed, shall be deemed to be effective as of the date executed.

XV.

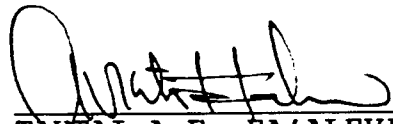
TERMINATION

This consent decree shall terminate when defendant has paid in full all penalties due, has completed all acts specified herein, and has achieved compliance with American Samoa Water Quality Standards for a period of 120 consecutive days, or defendant has terminated its operations in American Samoa, whichever occurs first. In the event defendant chooses to terminate operations in American Samoa, defendant is required to pay all fines and penalties that may have


1 accumulated under this consent decree. Termination of this
2 consent decree shall be accomplished by a noticed motion from
3 plaintiff or defendant requesting termination, and the
4 Court's granting of said motion, after opportunity for the
5 other party to oppose said motion.

6 WE HEREBY STIPULATE, AGREE, AND CONSENT to the entry by
7 the Court of this decree without further notice to the
8 parties.

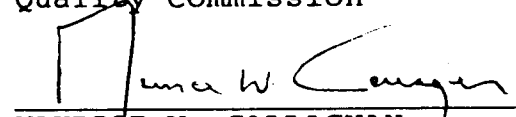
9 6/20/90
10 DATE

11 
12 TAUTAI A.F. FA'ALEVAO
13 Attorney General
14 Attorney for the Plaintiff

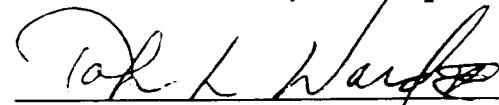
15 6-20-90
16 DATE

17 
18 WILLIAM P. COLEMAN, Chairman
19 American Samoa Environmental
20 Quality Commission

21 6.20.90
22 DATE

23 
24 MAURICE W. CALLAGHAN
25 President & General Manager
Starkist Samoa, Incorporated

26 20 June 90
27 DATE

28 
29 JOHN L. WARD II
30 Attorney for Defendant

31 SO APPROVED, ORDERED, AND DECREED. Dated and entered at
32 Fagatogo, American Samoa, this ____ day of _____, 1990.

33 _____
34 Justice of the High Court

Appendix A

CA 21 -90

Interim Effluent Limits for Total Nitrogen and

Total Phosphorus

Star-Kist Samoa, Incorporated

1. Defendant shall achieve compliance with the following interim effluent limits for nitrogen and phosphorus no later than August 1, 1990 and shall remain in compliance with these interim effluent limits at all times until March 6, 1991:

(a) Monthly Average of Total Nitrogen (lbs./day):

The lesser of:

i) 1,785 lbs./day, OR

ii) (Monthly Average Total Nitrogen Influent) x (0.65).

(b) Daily Maximum of Total Nitrogen (lbs./day):

The lesser of:

i) 2,745 lbs./day, OR

ii) (Daily Maximum Total Nitrogen Influent) x (0.65).

(c) Monthly Average of Total Phosphorus (lbs./day):

The lesser of:

i) 170 lbs./day, OR

ii) (Monthly Average Total Phosphorus Influent) x
(0.65).

(d) Daily Maximum of Total Phosphorous (lbs/day):

The lesser of:

i) 320 lbs/day, OR

ii) (Daily Maximum Total Phosphorous Influent) x
(0.65).

2. Monitoring Requirements and adjustment of Interim
Effluent Limits for Nitrogen and Phosphorus.

(a) Commencing on August 1, 1990 and continuing through the
earlier of October 31, 1990 or that date which is three
consecutive months after the commencement of High Strength
Waste Segregation, defendant shall collect, twice weekly,
composite samples, (as such term is defined in defendant's
NPDES permit) of each of the following waste streams: (i)
precooker juice, (ii) presswater, (iii) DAF influent, and
(iv) DAF effluent. Monitoring must be conducted using only
those test procedures allowed under defendant's NPDES permit.

(b) Each of the waste stream composite samples identified in
subparagraph (a) shall be sampled twice weekly for the
following parameters. Analysis for each parameter shall be
performed in the manner specified in defendant's NPDES
permit, with the exception of oil and grease, which shall be
sampled in the manner specified below.

i) Total nitrogen (daily maximum and monthly
average in mg./l);

1 ii) Total phosphorus (daily maximum and monthly
2 average in mg./l);

3 iii) Total suspended Solids (daily maximum and monthly
4 average in mg./l); and

5 iv) Daily Flows (daily maximum and monthly average
6 in MGD).

7 (c) Each of the waste streams identified in subparagraph (a)
8 above shall be monitored for oil and grease as follows: each
9 oil and grease sample shall consist of four individual
10 grab samples ("sub-samples") which shall be taken at even
11 intervals during each production period in which samples are
12 taken. Each sub-sample shall be separately analyzed. The
13 results of each sub-sample, and the mean value of the four
14 sub-samples, shall be reported for daily maximum and monthly
15 average (in mg./l).

16 (d) Defendant shall submit a monthly report providing the
17 results of the sampling and analyses identified above to the
18 American Samoa Environmental Quality Commission (ASEQC) and
19 the United States Environmental Protection Agency (USEPA) no
20 later than seven (7) days after the last day of each month in
21 which data has been collected. The report shall be signed by
22 a responsible corporate officer, who shall certify the
23 accuracy of its contents.

24 (e) The formulas for the calculation of interim effluent
25

limits for nitrogen and phosphorus set forth in paragraph 1 above utilize a Dissolved Air Flotation (DAF) removal efficiency rate of 35%. This removal efficiency rate (and therefore the interim effluent limitation) may be adjusted, at the USEPA's sole discretion, after analysis of the effluent data collected pursuant to subparagraphs (a) and (b) above.

(f) Except as expressly provided for in subparagraphs (a) through (c) above, all monitoring, sampling and reporting required by this Consent Decree shall be performed pursuant to and in accordance with Defendant's NPDES permit.

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Appendix B

ASG v. Starkist Samoa, Inc.

C.A. No. 21 -90

CONSENT DECREE

PAYMENT TERMS

Payment under section VI ("Penalty for Past Violations") shall be made as follows:

<u>Date</u>	<u>Payment Due</u>
Within 30 days of the Date of entry of this Consent Decree	\$70,000
Within 90 days of the Date of entry of this Consent Decree	\$40,000
Within 180 days of the Date of entry of this Consent Decree	\$40,000
<hr/>	
TOTAL	\$150,000

TAUTAI A.F. FA'ALEVAO
Attorney General
Virginia L. Gibbons
Assistant Attorney General
P.O. Box 7
Fagatogo, American Samoa 96799
Telephone No. (684) 633-4163
Telefax No. (684) 633-1838

Attorneys for American Samoa Government

IN THE HIGH COURT OF AMERICAN SAMOA

TRIAL DIVISION

AMERICAN SAMOA GOVERNMENT,) C. A. No. 65-90
)
Plaintiff,)
)
vs.)
)
STARKIST SAMOA, INC.)
)
Defendant.)

COMPLAINT

Comes Now plaintiff AMERICAN SAMOA GOVERNMENT, by and through its undersigned counsel, and for a cause of action against defendant above named, complains and alleges as follows:

1. This is an action for injunctive relief and assessment of penalties against the defendant for violation of the American Samoa Environmental Quality Act and the Water Quality Standards promulgated pursuant thereto.

2. Plaintiff AMERICAN SAMOA GOVERNMENT is the duly established governing authority for the Territory of American Samoa.

3. Defendant STARKIST SAMOA, INCORPORATED, was, at all times relevant herein, duly authorized to and doing business in American Samoa.

4. Jurisdiction is pursuant to ASCA 3.0103 and ASCA 3.0208.

5. Defendant is one of two corporations which own and operate a fish cannery and fish processing plant in American Samoa, the second being VCS SAMOA PACKING COMPANY.

6. In the course of and as a necessary part of the defendant's cannery operations, defendant produces and discharges through an outfall into Pago Pago Harbor concentrated fish wastewater containing measurable levels of nitrogen and phosphorous.

7. Pursuant to the American Samoa Environmental Quality Act, ASCA 24.0107, plaintiff has promulgated regulations, set forth in 24.0206(c) American Samoa Administrative Code (ASAC) and henceforth referred to as the "American Samoa Water Quality Standards," fixing the permissible levels of nitrogen and phosphorous which may be discharged into Pago Pago Harbor.

8. Based upon several scientific studies, including the Joint Study of Fish Cannery Wastewater Effluent Loading Reduction-Phase I (November, 1984) and the Wasteload Allocation Study for Pago Pago Harbor (August, 1989), 95 to 97 percent of the total nitrogen and total phosphorous in Pago Pago Harbor is directly attributable to the activities of defendant and the

other tuna cannery in American Samoa.

9. All data pertaining to defendant's discharge activities in Pago Pago Harbor relied upon herein were submitted to the American Samoa Environmental Quality Commission/Environmental Protection Agency, by defendant.

10. The American Samoa Environmental Quality Act, ASCA 24.0123, states that any absence or failure of the Environmental Quality Commission to issue any rule or order does not relieve defendant from compliance with discharge control requirements.

11. From June 16, 1981 to the present, defendant has, on a daily basis, discharged wastewater from its outfall into Pago Pago Harbor in excess of the limitations set forth in the American Samoa Water Quality Standards for both nitrogen and phosphorous, and in violation of ASCA 24.0167.

12. Defendant's activities as herein described have contributed to chronic, serious, and inestimable harm to Pago Pago Harbor.

13. The environment and ecology of Pago Pago Harbor will suffer future irreparable harm if defendant is not permanently enjoined from violation of American Samoa Environmental Quality Act and the Water Quality Standards promulgated pursuant thereto.

15. Pursuant to sections 24.0167 and 46.2103, ASCA, the defendant is subject to a penalty not to exceed \$500 per day

per violation.

WHEREFORE, plaintiff AMERICAN SAMOA GOVERNMENT
respectfully requests that:

1. Defendant be permanently enjoined from any and all future violations of the Environmental Quality Act, and from discharges into Pago Pago Harbor which violate the nitrogen and phosphorous Water Quality Standards except as expressly authorized by the Government of American Samoa, or alternatively, as expressly authorized by the United States Government/U.S. Environmental Protection Agency.

2. Defendant be ordered to comply with a schedule to be determined which will set forth specific interim limitations for inter alia, nitrogen and phosphorous discharges and specific dates for implementing plans, programs, and any necessary construction to bring about speedy compliance with the water pollution provisions of the American Samoa Environmental Quality Act and the Water Quality Standards promulgated pursuant thereto.

3. Defendant be assessed, pursuant to sections 24.0167 and 42.2103 ASCA, a penalty not to exceed \$500 for each day of violation of American Samoa Water Quality Standards for nitrogen and \$500 for each day of violation of American Samoa Water Quality Standards for phosphorous, for daily violations commencing June 16, 1981 to the present.

4. For necessary costs and reasonable attorneys fees.

5. For such further and additional relief that the Court
deems just and proper.

Dated at Fagatogo, American Samoa, this 20th day of June,
1990.

TAUTAI A. F. FA'ALEVAO
Attorney General

By:

Virginia L. Gibbons
Attorneys for Plaintiff
American Samoa Government

respective definitions established in Section 502(5) of the Act, 33 U.S.C. §1362(5), Respondent is therefore subject to the provisions of the Act, 33 U.S.C. §1251 et seq.

2. Section 301(a) of the Act, 33 U.S.C. §1311(a), provides that except as in compliance with certain specified sections of the Act, including Section 402, "the discharge of any pollutant by any person shall be unlawful." Section 402 of the Act, 33 U.S.C. §1342, authorizes EPA to issue a National Pollutant Discharge Elimination System ("NPDES") permit allowing for the discharge of pollutants into waters of the United States. Compliance with Section 301(a) of the Act therefore requires, inter alia, compliance with a valid NPDES permit.

3. EPA, under the authority of Section 402(b) of the Act, issued NPDES Permit No. AS0000019 (the "Permit") to Star-Kist Samoa, Inc. on February 3, 1987, to become effective on March 8, 1987 and to expire on March 7, 1992. On February 27, 1987, Respondent sought an evidentiary hearing on certain of the provisions of the permit, including the requirement that Respondent come into compliance with the interim effluent limitations for nitrogen and phosphorus set forth in the permit. The Regional Administrator denied Respondent's request for an evidentiary hearing on this issue and Respondent appealed to the Administrator. On September 26, 1989, the Administrator denied Respondent's appeal and ruled that the interim effluent limits set forth in the permit for nitrogen and phosphorus were to become effective immediately. On October 25, 1989 Respondent

served its Petition for Reconsideration of the Administrator's Order, and on November 3, 1989 the Chief Judicial Officer denied Respondent's Petition.

4. Condition I.A.2.a. of the Permit allows Respondent to discharge a daily maximum 4,300 lbs./day and a monthly average of 2,200 lbs./day of nitrogen. Monitoring of such discharge is required twice weekly.

5. Respondent has violated Section 301(a) of the Act, 33 U.S.C. § 1311(a), by violating Condition I.A.2.a. of the Permit in that Respondent discharged the amounts of nitrogen set forth in Appendix A annexed hereto and made a part hereof on each date set forth in Appendix A.

6. On the basis of the facts specified in paragraphs 1 through 5 above, the Director of the Water Management Division of EPA Region 9 hereby finds Respondent in violation of Sections 301(a) and 402 of the Act, 33 U.S.C. §§ 1311(a) and 1318.

ORDER FOR COMPLIANCE

Based on the foregoing Findings, and considering the potential environmental and human health effects of the violation, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to the authority of Sections 308 and 309 of the Act, 33 U.S.C. §§ 1318 AND 1319, IT IS HEREBY ORDERED that Respondent comply with the following requirements:

1. Not later than July 31, 1990, Respondent shall install all necessary equipment for and implement a system capable of segregating and removing all Dissolved Air Flotation sludge,

press water and pre-cooker juice (i.e., those wastes that are high in nitrogen and phosphorus) from present cannery effluent (hereinafter referred to as "High Strength Waste Segregation").

2. Not later than July 31, 1990, Respondent shall segregate and remove all such high strength wastes from its effluent, shall barge all such high strength wastes to the designated ocean dump site, as identified in 55 Federal Register 3948 (Feb. 6, 1990) and shall dump such high strength wastes at that ocean dump site. Thereafter, Respondent shall no longer dispose of said effluent through its NPDES permitted point source, i.e., Outfall Serial No. 001.

3. Respondent shall, no later than August 1, 1990, achieve and thereafter maintain compliance with the following interim effluent limits for nitrogen and phosphorus and shall remain in compliance with these interim effluent limits at all times until March 6, 1992:

(a) Monthly Average of Total Nitrogen (lbs./day): The lesser of i) 1,785 lbs./day, OR ii) (Monthly Average Total Nitrogen Influent [lbs./day]) x (0.65).

(b) Daily Maximum of Total Nitrogen (lbs./day): The lesser of: i) 2,745 lbs./day, OR, ii) (Daily Maximum Total Nitrogen Influent [lbs./day]) x (0.65).

(c) Monthly Average of Total Phosphorus (lbs./day): The lesser of: i) 170 lbs./day, OR, ii) (Monthly Average Total Phosphorus Influent [lbs./day]) x (0.65).

(d) Daily Maximum of Total Phosphorus (lbs./day): The lesser of: i) 320 lbs./day, OR, ii) (Daily Maximum Total Phosphorus Influent [lbs./day]) x (0.65).

4. Monitoring Requirements and Adjustment of Interim Effluent Limits for Nitrogen and Phosphorus

(a) Commencing on August 1, 1990 and continuing through the earlier of October 31, 1990 or that date which is three consecutive months after the commencement of High Strength Waste Segregation, Respondent shall collect, twice weekly, composite samples (as such term is defined in Respondent's NPDES permit) of each of the following waste streams: (i) precooker juice, (ii) presswater, (iii) DAF influent and (iv) DAF effluent. Monitoring must be conducted using only those test procedures allowed under Respondent's NPDES permit.

(b) Each of the waste stream composite samples identified in subparagraph (a) shall be analyzed twice weekly for the following parameters. Analysis for each parameter shall be performed in the manner specified in Respondent's NPDES permit, with the exception of oil and grease, which shall be sampled and analyzed in the manner specified below.

- i) Total nitrogen (daily maximum and monthly average in mg./l);
- ii) Total phosphorus (daily maximum and monthly average in mg./l);
- iii) Total Suspended Solids (daily maximum and monthly average in mg./l); and

iv) Daily Flows (daily maximum and monthly average in MGD).

(c) Commencing on August 1, 1990 and continuing through the earlier of October 31, 1990, or that date which is three consecutive months after the commencement of High Strength Waste Segregation, Respondent shall monitor each of the waste streams identified in subparagraph (a) for oil and grease as follows: each oil and grease sample shall consist of four individual grab samples ("sub-samples") which shall be taken at even intervals during each production period in which samples are taken. Each sub-sample shall be separately analyzed. The results of each sub-sample, and the mean value of the four sub-samples, shall be reported for daily maximum and monthly average (in mg./l).

(d) Respondent shall submit a monthly report providing the results of the sampling and analyses identified above to the American Samoa Environmental Quality Commission (ASEQC) and the United States Environmental Protection Agency (EPA) no later than seven (7) days after the last day of each month in which data has been collected. The report shall be signed by a responsible corporate officer, who shall certify the accuracy of its contents in the manner set forth herein.

(e) The formulas for the calculation of interim effluent limits for nitrogen and phosphorus set forth in paragraph 1 above utilize a Dissolved Air Flotation (DAF) removal efficiency rate of 35%. This removal efficiency

rate (and therefore the interim effluent limitation) may be adjusted, at EPA's sole discretion, after analysis of the data collected pursuant to subparagraphs (a) and (b) above.

(f) Except as expressly provided for in subparagraphs (a) through (c) above, all monitoring, sampling and reporting required by this Order shall be performed pursuant to and in accordance with Respondent's NPDES permit.

5. Respondent shall commence, as soon as possible, an engineering feasibility study or studies to assess the viable and potentially feasible alternatives for achievement of its NPDES permit final effluent limits based on the American Samoa Water Quality Standards ("water quality-based effluent limits"). Such study or studies shall be completed no later than March 31, 1991. Respondent shall provide EPA and ASEQC with interim written status reports regarding the progress and findings of such studies as such information becomes available, but no less often than once every three months.

6. Not later than May 31, 1991, Respondent shall notify EPA and ASEQC, in writing, of its selected method or combination of methods for achieving compliance with its water quality-based effluent limits (the "selected alternative").

7. Not later than March 5, 1992, Respondent shall complete all actions necessary to meet its water quality-based effluent limits under the selected alternative.

8. Not later than March 7, 1992, Respondent shall achieve compliance with its water quality-based effluent limits.

9. If Respondent fails to meet any compliance deadline or interim effluent limitation set forth herein, Respondent shall file a written noncompliance report with EPA and ASEQC within ten days of the missed deadline or exceeded limit. The report shall specifically describe the impact of the event, provide a summary of the reasons for or explanation regarding the event, the anticipated time of non-compliance, and the measures to be taken to prevent or minimize the impact of the event.

10. All applications, certifications and reports submitted pursuant to this Order shall be signed by a principal executive officer of Respondent and shall include the following statement:

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


11. Nothing contained in this Order shall affect Respondent's continuing obligation to comply with the Clean Water Act and with each and every term and condition of its Permit. This Order is not and shall not be interpreted to be an NPDES Permit under Section 402 of the Act, 33 U.S.C § 1342, nor shall compliance with this Order be deemed to be compliance with the Permit.

12. All submissions required by this Order shall be mailed to the following addressees:

U.S. Environmental Protection Agency, Region 9
Office of Pacific Island and Native American Programs
1235 Mission Street
San Francisco, CA 94103
Attention: Norman L. Lovelace (E-4)

American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799
Attention: Pati Faiai

Date: JUN 18 1990



Harry Seraydarian
Director
Water Management Division
U.S. EPA, Region 9
1235 Mission Street
San Francisco, CA 94103

APPENDIX A

SUMMARY OF DISCHARGE MONITORING REPORTS

Name of Discharger: Star-Kist Samoa, Inc.
 NPDES Permit No.: AS0000019
 Reporting Period: September, 1989 through February, 1990

<u>Permit Condition</u>	<u>Effluent Constituents</u>	<u>Effluent Limitation</u>	<u>Month and Yr.</u>	<u>Value(s) Reported in Violation</u>
A.2.a	Total Nitrogen	2200 lbs/day Monthly Average	Oct. 89	3044
			Nov. 89	3468
			Dec. 89	3287
			Jan. 90	3147
			Feb. 90	2770
		4300 lbs/day Daily Maximum	Oct. 89	4544.7
			Nov. 89	4310.6
			Dec. 89	4704, 5051
			Jan. 90	4322

SK

4/15/93

As of 2/11/92 - discharge from new outfall meet new IEL

	Av.	Max	Av.	Max
TP =	192	309	170	320
TN =	1200	2100	1675	2127

The lesser of 35% removal or μ

"old limits"

Started using new outfall Feb. 13th

*DMR says violations occurred for Oct. ~~Nov.~~ Dec. ^{Jan. Feb.} for 3/8/91 NPDES limits

12/91	not received
1/92	ok
2/92	ok
3/92	TN av. = 1696 - fish meal plant problem
4/92?	TN av. = 1266; Daily Max TN = 2281
5/92	ok
6/92	ok
7/92	ok
8/92	ok
9/92	ok
10/92	ok

New Limits

11/91	ok
10/91	?
9/91	ok
8/91	TN av. exceeded by 20 lbs
7/91	TN 2 Daily Max viol.; 1 Month Av. TN
6/91	ok
5/91	TN monthly av. exceeded by 10 lbs.
4/91	TN 2 daily max exceeded
3/91	TN 2 daily max exceeded
2/91	

paid 49,000

ASG Consent Agreement

Termination: - paid all penalties

- completed all specified acts

- achieved compliance w/wgs for 120 days

- via noticed motion from either party, Court grant motion after opportunity for other party to oppose motion

- viol. of ammonia / TP?

- was wq monitoring data reviewed to determine compliance w/wgs?



OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX: (415) 744-1604
PHONE: (415) 744-1596

DATE: 4/16/93 PAGES: 7 (incl. cover)

TO: Sheila Wiegman ORG: ASEPA
FAX NO: _____ PHONE NO: _____

FROM: Pat Young PHONE NO: (415) 744 - 1594

NOTE: Here is the letter from SK re: payment of violations in 1991. I missed the fact that they also paid \$11,000 for violations in July 1991. Also sending 3/92 A/O report.

Re: how you determined compliance - just wanted to be sure for my own info. No need to check w/ AG.

I was wondering about status of canneries' recovery of construction costs of outfall from trust fund. I remember Muarry saying they were meeting w/ AG (?) on this & were planning to offset future payments from what was owed them. I think you should still formally request payment of fines as they shouldn't think these outstanding payments have been forgotten or excused. Also if what they owe is agreed to be offset against what ASG owes them, it should be stated in a letter and submitted to the Court as part of documentation that all fines have been "paid". May seem a paper exercise but it's the principle!

Also, I never got 2nd page of fax re: who to call re: paper recycling. Please re-fax & I'll get on it!



OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX: (415) 744-1604
PHONE: (415) 744-1596

DATE: 4/16/93 PAGES: 5 (incl. cover)

TO: Sheila ORG: _____
FAX NO: _____ PHONE NO: _____

FROM: Pat PHONE NO: (415) 744 - _____

NOTE: ① Aug. 1991 letter to SK attached. Sorry I only have concurrence copy. As usual the person who does our copying + mailing probably "forgot" to ~~make~~ make a copy for the file.

② I can't believe it but one of your envir. ed. grant proposals made the first + second screenings! So, we need the Gov's signature on the application. Think it possible to fax a signed copy some-time next week? Thanks.

To: Pat Young, OPINAP
From: Sheila W, ASERA

Today is Flag Day so its quiet.

Any word on Paper recycling?

My findings on the Starlist monthly reports: violations are the same as yours, only I didn't have the 1/91 report! I also can't find the 3/92 report. The SP termination was based on ambient measurements. This is the only way to determine if the KWAs are met. While measurements were not taken at the outfall - one of the stations is very close. I don't think I can apply the effluent limitations after the outfall is installed, though I could have the Attorney General give me an interpretation.

Could you fax me the 3/92 report and the letter re: \$49,000 payment? Do you think I should try to get

-2-

the fines? It really bothers me that
they were never paid, but then ASB
has not paid the carriers money
from the trust fund for the
outfall - I don't have too much
sympathy!

Thanks.

FEB 24 1992 *ser*
Cpy to Mike, Doug



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

February 15, 1992

Pat Young
American Samoa Program Manager
U. S. EPA Region 9 (E-4)
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Ms. Young:

Pursuant to the requirements of the amendment issued to StarKist Samoa on February 11, 1992 in reference to EPA's Administrative Order, Docket No. IX-FY90-22, this is to advise you that at approximately 10:00 a.m. on February 13, 1992, StarKist Samoa, Inc. commenced testing of its joint pipeline pumping system. The applicable agencies were notified the day before. Approximately 10,000 gallons of seawater from the Pago Pago Harbor were pumped into the holding tank and discharged through the new outfall during the test. The control system for the pumping system was tested and found to be functioning properly.

On February 14, 1992, at 11:00 a.m. local time, the valve connected to the existing outfall was closed off, chain-locked and sealed. Discharge of StarKist Samoa Inc.'s treated effluent through the new joint outfall commenced at that time.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

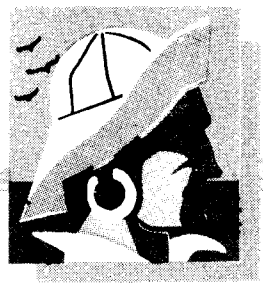
/tl

cc: William Coleman, ASEQC
Pati Fai'ai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, ASAG

Ralph A. Ward
Norman Wei

04 NOV 1991

Gpy to Mike Lee
Doug hidden
Norm



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

October 28, 1991

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Norman Lovelace (E-4)
OPINAP
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: StarKist Samoa's Report on its Dissolved Air Flotation Unit

Pursuant to your request as stated in Mr. Seraydarian's letter of August 13, 1991, please find enclosed a copy of StarKist Samoa's report on its Dissolved Air Flotation Unit.

Sincerely,

Maurice W. Callaghan
General Manager

cc: Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Attachment

**Report on
Treatment Effectiveness
of Dissolved Air Flotation Unit**

Submitted to:

**United States Environmental Protection Agency, Region 9
and
American Samoa Environmental Quality Commission**

By

StarKist Samoa, Inc.

Purpose of this Report

The purpose of this report is to assess the effectiveness of StarKist Samoa's Dissolved Air Flotation Unit. This report also presents new information on StarKist's influent characteristics which serves to illustrate the continued difficulties in meeting the 25 percent removal efficiency for Total Nitrogen.

Background

Dissolved Air Flotation units are primarily designed to remove oil and grease from wastewater. Chemical coagulation, such as the addition of aluminum sulfate and polymer, is added to the DAF unit in order to aid in the removal of particulate matters and phosphorus. Precipitation of phosphorus through addition of chemicals is a proven treatment technology and is well documented.

Removal of nitrogen, especially in soluble form, by means of chemical precipitation is a more contentious issue. In US EPA's Process Design Manual for Nitrogen Control (October 1975), it is stated that overall nitrogen removal efficiency in treatment processes such as chemical coagulation is rarely high and is often restricted to particulate forms.

StarKist Samoa Inc.'s DAF Unit

Review of StarKist Samoa's influent and effluent data covering the period from January 1989 to July 1991 (30 months) shows that the DAF unit has been achieving a removal efficiency of 85 to 98 percent for Total Suspended Solids (TSS) and Oil & Grease (O&G). Prior to high strength waste segregation in August 1990, the removal efficiencies were in the 94 to 98 range. The separation of the press liquor and cooker juice containing high concentrations of TSS and O&G from the treatment plant resulted in a reduction of loadings of over 70 percent of TSS and O&G to the DAF unit. This accounted for the slight decrease in the removal efficiency after August 1990.

StarKist Samoa's DAF unit utilizes chemical coagulation and polymer addition to aid in the removal of nutrients. Total Phosphorus removal has been maintained at between 60 to 80 percent throughout the 30-month review period. This level of removal is consistent with the proven effectiveness of alum and polymer as a phosphorus removal agents.

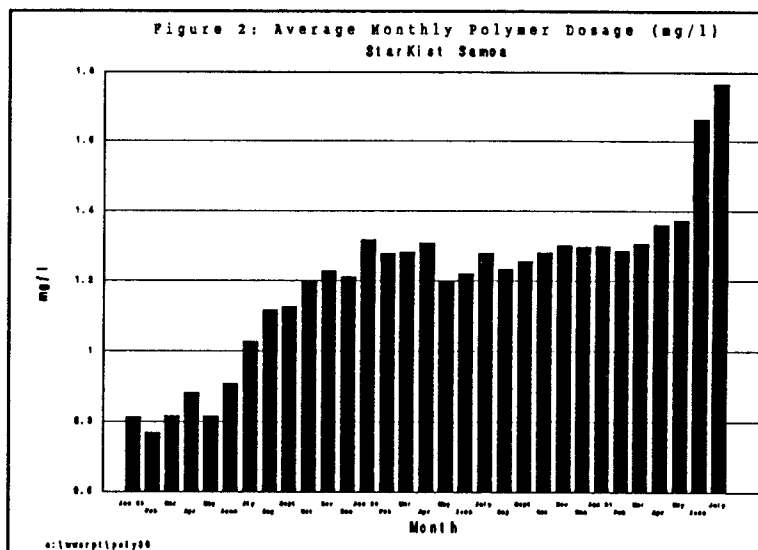
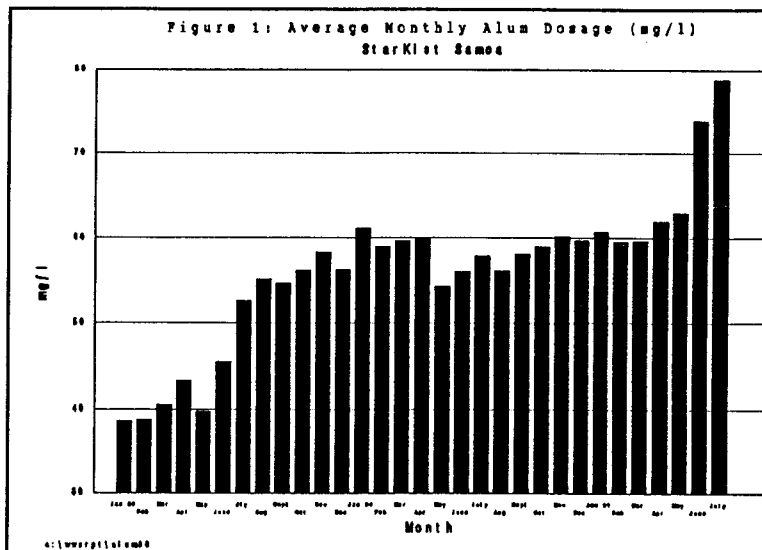
Nitrogen removal, on the other hand, has decreased significantly since August 1990. As with TSS and O&G, the diversion of high strength wastes from the DAF unit has reduced the influent TN loadings and caused a decrease in the removal efficiency. This is coupled with the initiation of certain source reduction programs underway at the plant further reducing the influent loadings.

Analyses of the plant influent for the month of August 1991 (Table 1) show that about 72 to 80 percent of the TN are in soluble form - a form that is not susceptible to chemical coagulation and precipitation treatment. This is further supported by the high soluble TN fraction in the treated effluent which ranged from 87 percent to almost 100 percent. Review of the August 1991 data in Table 1 also shows that the DAF cell was able to remove about 60 percent of the "particulate Total Nitrogen" loading-measured as the difference between the filtered and unfiltered loadings.

Chemical Dosages

When StarKist Samoa was negotiating with US EPA on the interim effluent limitations back in early 1990, the agency expressed concern that the plant might cut back on chemical dosages in order to save costs. This was a primary concern which led to the imposition of the 35% removal efficiency.

StarKist Samoa has not reduced the chemical dosages since August 1990. In fact, alum dosage was maintained at the 60 mg/l level until June 1991 when it was increased to the 70-80 mg/l range (see Figure 1). Polymer dosages were kept at 1.2 mg/l in August 1990 and have since increased to 1.8 mg/l (see Figure 2). There has not been any attempt by the plant whatsoever to reduce chemical dosages post August 1990.



Comparison with Samoa Packing's Treatment System

Comparisons of the treatment plant removal efficiencies between StarKist Samoa and Samoa Packing have been made by the regulatory agency in its 13 August 1991 letter to StarKist Samoa. It should be noted that StarKist Samoa's DAF unit has consistently achieved a much higher level of TP removal efficiency than Samoa Packing due to its addition of both polymer and alum.

With respect to Samoa Packing's higher TN removal efficiency as stated in EPA's August 13th letter, it should also be noted that SamPac's fish thawing process is different from that of StarKist's. SamPac recycles its thaw water which is made up of city water. StarKist uses once through sea water for thawing. The process at SamPac probably yields a much higher level of nitrogen loading in the influent than at StarKist's. This would certainly account for SamPac's ability to consistently meet the 35 percent removal requirement.

Validity of StarKist Samoa's TN and TP Data

All of StarKist Samoa's influent and effluent analyses for Total Nitrogen and Total Phosphorus are performed by AECOS - a qualified commercial laboratory in Honolulu - which met US EPA's DMR-QA Evaluation Study 011 for TP and TN.

Decreasing Trend in Nutrient Loadings to the Harbor

The loadings of TP and TN (measured in pounds per day) into the Pago Pago Harbor have been steadily decreasing. The August 1991 Total Nitrogen loading to the Bay was reduced to only 60 percent of the absolute loading limit of 1,675 #/day.

Conclusions

A review of the plant's operational data did not reveal any operational problems. This is substantiated by the consistently high removal efficiencies for TSS, O&G, TP and particulate nitrogen.

d:\wei\samoa\daf

Table 1: Analysis of Soluble Nitrogen in Starkist Samoa's wastewater (August 1991)

		Total Nitrogen				Soluble TN						Particulate TN		
Date	Flow	Influent	Effluent	Influent	Effluent	Influent	Percent	Effluent	Percent	Influent	Effluent	Influent	Effluent	Percent
August	mgd	mg/l	mg/l	#/day	#/day	mg/l	Soluble	mg/l	Soluble	#/day	#/day	#/day	#/day	Removal
Aug 1	1.5501	188.00	122.00	2423	1573	124.0	66%	110.0	90%	1598	1418	825	155	81.25%
Aug 6	1.3128	111.00	94.00	1212	1026	84.2	76%	80.3	85%	919	877	293	150	48.88%
Aug 8	1.1950	157.00	114.00	1560	1133	110	70%	94.1	83%	1093	935	467	198	57.66%
Aug 14	1.4700	91.30	98.90	1116	1209	64.8	71%	82.7	84%	792	1011	324	198	38.87%
Aug 16	1.2132	122.00	107.00	1231	1080	90.5	74%	91.1	85%	913	919	318	160	49.52%
Aug 20	1.4589	125.00	87.60	1517	1063	85.7	69%	66.9	76%	1040	812	477	251	47.33%
Aug 22	1.3643	100.00	88.50	1135	1004	79.8	80%	72.9	82%	905	827	229	177	22.77%
Aug 29	1.4072	102.00	47.30	1194	554	74.3	73%	48.7	* 100%	869	570	324	* 0	100.00%
Aug 30	1.0617	84.70	72.30	748	638	55.3	65%	68.4	95%	488	604	260	34	86.73%
Average	1.3370	120.11	92.40	1348	1031	85.40	72%	79.46	76%	958	886	391	147	59.22%
Maximum	1.5501	188.00	122.00	2423	1573	124.00	80%	110.00	95%	1598	1418	825	251	100.00%

Particulate TN = Total TN – Soluble TN

* rounded off

04 NOV 1991

ASEPA
Peter H.
Mike Lee



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

October 30, 1991

Mr. Norman Lovelace
OPINAP - E4
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Corrective Actions on 1991 DMR-QA Program for Permittee
AS0000019 - StarKist Samoa Inc.

This report is prepared in response to the DMR-QA Study 011 results and contains the corrective actions undertaken by the permittee for the following analytes:

1. Lead and Nickel. The metal analyses have been performed by Brewer Environmental Industries under subcontract to Aecos Lab in Honolulu. A letter from Brewer is enclosed. Aecos will be performing all metal analyses in the future.
2. Oil and Grease. The discrepancy in the oil & grease result was due to misplacement of the decimal point by Aecos Lab. The test result should have been reported as 18.750 instead of 18750.
3. 5-day BOD. This analysis was done by StarKist Samoa's own lab. Corrective actions are detailed in the attached memorandum from Tini Lam Yuen (lab supervisor) to Norman Wei.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

cc: N. Wei
R. Ward



BREWER
ENVIRONMENTAL
INDUSTRIES, INC.
W.C. MILLER COMPANY

Environmental Services Division

RECEIVED OCT 15 1991

October 11, 1991

Ms. Erlinda Rauto
AECOS, INC.
970 N. Kalaheo Ave., Suite C311
Kailua, Hawaii 96734

Dear Ms. Rauto:

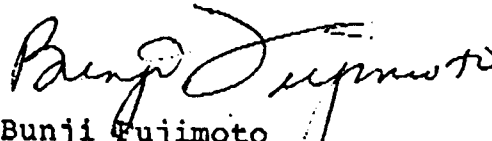
In regards to the NOT ACCEPTABLE results of DMR-QA Study #11, we have reviewed and rechecked all data available for these analyses and have not found any discrepancies in calculations and reporting in the analyses of Aluminum, Lead, and Nickel as reported.

Corrective action taken include rechecking of all data, procedures, standards solutions and calibrations. We hope these processes will correct any possible problems.

If you have any question please call me at 964-5522.

Thank You!

Sincerely,


Bunji Fujimoto
Inorganic Section Leader

TO: Norman Wei

DATE: 10/16/91

FROM: Tini Lam Yuen *Jini*

SUBJECT: Response to DMR - QA
BOD Result Study No. 011

In response to DMR - QA BOD Result Study No. 011 I have reviewed our techniques, calculations, etc. using US EPA's check list. My findings/observations are summarized below.

1. Check BOD Methods (if EPA approved).

- a. Method being used is EPA approved, specifically, we are using the iodometric method.

We recently received a dissolved oxygen (DO) meter (YSI Model 50B) for which we are currently testing our techniques and methodology using the Electrode Membrane Method. We feel the use of this method will greatly simplify BOD analysis. Less time will be spent on reagent preparation, titrations, etc. because we will be reading DO directly out of BOD bottles that will be incubated. Calibration for the equipment is simple and will take less than 5 minutes.

- b. Performance of BOD method is in accordance with given procedures.

2. Check BOD Analysis Calculations (for errors).

Calculations have been re-checked, units were given as specified, and a colleague double checked calculations.

3. Check Titrating Reagents

Sodium thiosulfate solution was standardized.

4. Check Instrument (used in the analysis).

- a. The Mettler Analytical balance was calibrated.
- b. pH electrode was functional and Orion pH meter was calibrated.

5. Check Reagent Standards

- a. Standard solutions were renewed. These included phosphate buffer, magnesium sulfate, calcium chloride, ferric chloride (all used in the preparation of the dilution water), manganous sulfate, alkali-iodide-arsize, and starch solutions.
- b. Independent QC sample was not analyzed.
Corrective Action: We have recently received the first batch of performance samples from Environmental Resource Associates Arvada, CO. These samples (which include BOD samples) will be analyzed on a bimonthly basis.

DMR Response
October 16, 1991
Page 2

6. Check Data Transcription Errors

This has been done and no errors were found.

7. Check Laboratory Pure Water

Water still is cleaned on a monthly basis. Water filters changed as needed.

8. Check to Determine that Personnel are Properly Trained to Perform this Analysis.

Lab technicians are adequately trained, but further, training is needed to improve their analysis of BOD.

Corrective Action: We have proposed to management that the Lab Supervisor be sent off-island for training in BOD analysis, with reference to membrane electrode method, and to take a short course on "quality assurance for the laboratory" sponsored by the Association of Official Analytical Chemists (AOAC). A special training for laboratory technicians will be held to improve their analytical techniques, etc., afterwards.

cc: M. Loob
M. Callaghan

TLY/pat

StarKist Seafood Company
Facsimile Transmittal



DATE: 9 October, 1991
TO: Pat Young, EPA Region 9
FROM: Norman Wei
FAX Number:

Number of pages including cover sheet: This one only

Our Fax Number is (213) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (213) 590-3873**

=====

Special Messages:

Pat:

I checked with our contract lab, Aecos, concerning the analysis of soluble nitrogen. Here is what they told me:

The samples were filtered through Whatman GF/C (1.2 micron) filter paper. This procedure is used to separate the particulates from the samples. All glassware and filter paper were pre-rinsed with dilute sulfuric acid. Blanks were run for all analyses.

Note that all our samples from the plants are acidified with sulfuric acid upon collection. Both the lab and I agree that there is not likely to be any nitrification that would increase the soluble fraction significantly. All previous analyses of tuna effluent have shown very low levels of nitrite and nitrate.

Based on the above, I would think that the filtered sample results for August 1991 were reasonable indicators of the soluble nitrogen fraction.

Norman

Starkist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT

August 1991

Total Phosphorus

Date August	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
Aug 1	1.5501	22.8	9.7	294	125
Aug 6	1.3128	16.9	5.7	185	62
Aug 8	1.1950	20.5	6.0	204	59
Aug 14	1.4700	13.6	4.5	166	55
Aug 16	1.2132	16.8	7.2	169	73
Aug 20	1.4589	18.8	4.9	228	59
Aug 22	1.3643	17.3	9.6	196	109
Aug 28 ²⁹	1.4072	16.1	4.5	188	52
Aug 30	1.0617	14.5	5.5	128	49
Average	1.3370	17.48	6.38	195	71
Maximum	1.5501	22.80	9.66	294	125

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	127
Daily Maximum	320
Daily Maximum (35% removal)	191

Total Nitrogen

Date August	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
Aug 1	1.5501	188.00	122.00	2423	1573
Aug 6	1.3128	111.00	94.00	1212	1026
Aug 8	1.1950	157.00	114.00	1560	1133
Aug 14	1.4700	91.30	98.90	1116	1209
Aug 16	1.2132	122.00	107.00	1231	1080
Aug 20	1.4589	125.00	87.60	1517	1063
Aug 22	1.3643	100.00	88.50	1135	1004
Aug 28 ²⁹	1.4072	102.00	47.30	1194	554
Aug 30	1.0617	84.70	72.30	748	638
Average	1.3370	120.11	92.40	1348	1031
Maximum	1.5501	188.00	122.00	2423	1573

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (25% removal)	1011
Daily Maximum	2440
Daily Maximum (25% removal)	1818

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Starkist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**July 1991****Total Phosphorus**

Date July	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.3680	26.6	7.2	303	82
9	1.2475	23.0	6.2	239	65
11	1.4505	23.3	8.9	280	107
12	1.1117	19.4	6.4	179	59
16	1.5030	20.3	7.7	254	97
18	1.3422	17.3	4.1	193	46
24	1.5349	18.4	7.6	235	97
25	1.3169	22.2	9.8	243	107
30	1.4196	18.2	4.3	215	51
Average	1.3660	20.96	6.92	238	79
Maximum	1.5349	26.60	9.77	303	107

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	155
Daily Maximum	320
Daily Maximum (35% removal)	197

Total Nitrogen

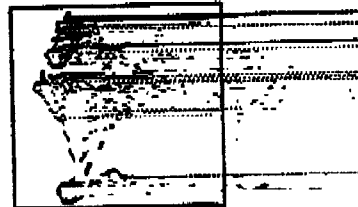
Date July	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.3680	213.00	150.00	2423	1706
9	1.2475	156.00	98.10	1618	1018
11	1.4505	171.00	123.50	2063	1490
12	1.1117	133.00	116.00	1230	1072
16	1.5030	164.00	140.00	2050	1750
18	1.3422	104.00	80.10	1161	894
24	1.5349	134.00	103.00	1710	1315
25	1.3169	147.00	117.00	1610	1281
30	1.4196	110.00	80.00	1299	944
Average	1.3660	148.00	111.97	1685	1275
Maximum	1.5349	213.00	150.00	2423	1750

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1095
Daily Maximum	2745
Daily Maximum (35% removal)	1575

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StarKist Seafood Company
Facsimile Transmittal



DATE: 7 October, 1991

TO: Pat Young

FROM: Norman Wei

FAX Number:

Number of pages including cover sheet: 2

Our Fax Number is (213) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (213) 590-3873**

Special Messages:

Pat:

Attached is a plot showing the influent loading of Total Nitrogen per ton of production for StarKist Samoa over the last 12 month period since segregation of high strength wastes.

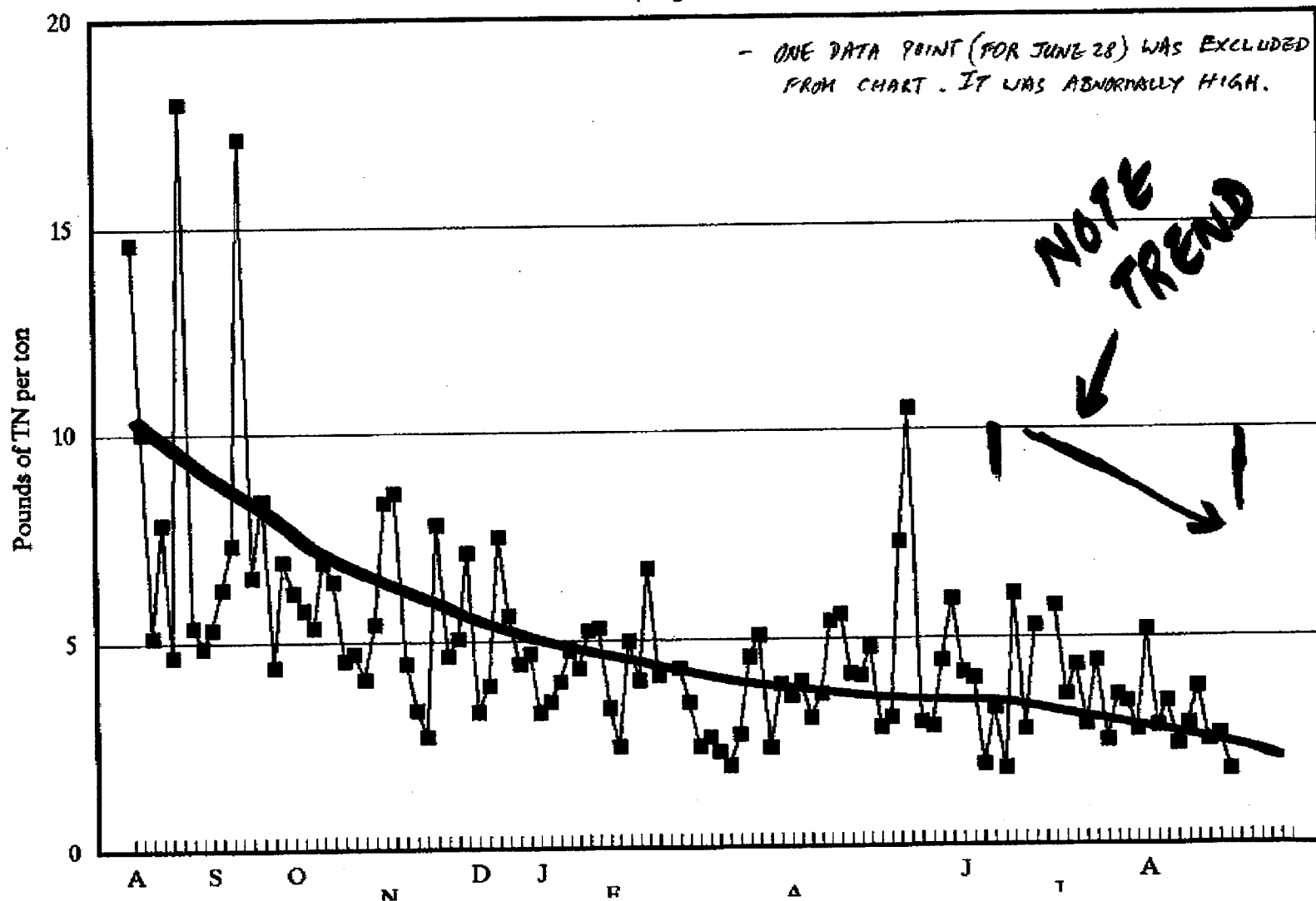
There is a slight downward trend especially over the last two months. I believe this trend reflects the results of efforts by the plant personnel to begin to minimize solid loadings to the treatment plant. I also believe that we can do better if we do not have the 25 percent removal efficiency placed on the DAF cell. Please keep in mind that the absolute loading to the harbor is decreasing steadily.

Please let me know if you have any questions.

Norman

Influent TN Loadings per ton of Production

StarKist Samoa (August 1990 to August 1991)



TOTAL P.01

10/2/91

Conversation w/Charles Chamberlain (707) 826-4346

Re: SK's analyses of soluble nitrogen

Charles said he would question how effluent sample is being taken, filtered, processed in order to get accurate idea of soluble nitrogen amount in effluent.

Sample should be taken and then filtered on the spot, put on ice and treated with something to stop bacterial action and having particles turn into ammonia or amino acids. (What is holding time between when sample taken and when analyzed?)

If samples are being taken without filtering and then sent off island for analysis, some of the nitrogen will go into solution as ammonia or solubilized amino acids.

Also what kind of filtering process/filters are they using? If utilizing a membrane filter (such as used for coliforms) these are very fine and will clog quickly. He suggests they do prefiltration and then use the membrane filters or try several ways to get the best sample.

If they are using glass fiber filters, these are coarser and some small particles may pass through and affect sample.

If measuring TN, by what techniques? If doing TKN, no nitrates/nitrites are being measured? May not be significant.

Perhaps soluble nitrogen is high partly attributable to how they are handling the waste streams (HSW takes out larger particles). If loadings are decreasing, they may need to adjust pH on influent, polymers, better operations, etc.



StarKist Seafood Company
Facsimile Transmittal



DATE: 3 October, 1991

TO: Pat Young (E-4)
US EPA Region 9

FROM: Norman Wei

FAX Number:

Number of pages including cover sheet: 7

Our Fax Number is (213) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (213) 590-3873**

Special Messages:

Pat:

I am sending you a "Draft - For Discussion Only" copy of our report detailing StarKist Samoa's DAF performance.

We can use this as the basis for our telephone conversation tomorrow morning at 8:30.

Regards,

Norman

DRAFT**FOR DISCUSSION ONLY****Purpose of this Report**

The purpose of this report is to assess the effectiveness of StarKist Samoa's Dissolved Air Flotation Unit. This report also presents new information on StarKist's influent characteristics which serves to illustrate the continued difficulties in meeting the 25 percent removal efficiency for Total Nitrogen.

Background

Dissolved Air Flotation units are primarily designed to remove oil and grease from wastewater. Chemical coagulation, such as the addition of aluminum sulfate and polymer, is added to the DAF unit in order to aid in the removal of particulate matters and phosphorus. Precipitation of phosphorus through addition of chemicals is a proven treatment technology and is well documented.

Removal of nitrogen, especially in soluble form, by means of chemical precipitation is a more contentious issue. In US EPA's Process Design Manual for Nitrogen Control (October 1975), it is stated that overall nitrogen removal efficiency in treatment processes such as chemical coagulation is rarely high and is often restricted to particulate forms.

StarKist Samoa Inc.'s DAF Unit

Review of StarKist Samoa's influent and effluent data covering the period from January 1989 to July 1991 (30 months) shows that the DAF unit has been achieving a removal efficiency of 85 to 98 percent for Total Suspended Solids (TSS) and Oil & Grease (O&G). Prior to high strength waste segregation in August 1990, the removal efficiencies were in the 94 to 98 range. The separation of the press liquor and cooker juice containing high concentrations of TSS and O&G from the treatment plant resulted in a reduction of loadings of over 70 percent of TSS and O&G to the DAF unit. This accounted for the slight decrease in the removal efficiency after August 1990.

StarKist Samoa's DAF unit utilizes chemical coagulation and polymer addition to aid in the removal of nutrients. Total Phosphorus removal has been maintained at between 60 to 80 percent throughout the 30-month review period. This level of removal is consistent with the proven effectiveness of alum and polymer as phosphorus removal agents.

Nitrogen removal, on the other hand, has decreased significantly since August 1990. As with TSS and O&G, the diversion of high strength wastes from the DAF unit has reduced the influent TN loadings and caused a decrease in the removal efficiency. This is coupled with the initiation of certain source reduction programs underway at the plant further reducing the influent loadings.

DRAFT
FOR DISCUSSION ONLY

Analyses of the plant influent for the month of August 1991 (Table 1) show that about 72 to 80 percent of the TN are in soluble form - a form that is not susceptible to chemical coagulation and precipitation treatment. This is further supported by the high soluble TN fraction in the treated effluent which ranged from 87 percent to almost 100 percent. Review of the August 1991 data in Table 1 also shows that the DAF cell was able to remove about 60 percent of the "particulate Total Nitrogen" loading- measured as the difference between the filtered and unfiltered loadings.

Chemical Dosages

When StarKist Samoa was negotiating with US EPA on the interim effluent limitations back in early 1990, the agency expressed concern that the plant might cut back on chemical dosages in order to save costs. This was a primary concern which led to the imposition of the 35% removal efficiency.

StarKist Samoa has not reduced the chemical dosages since August 1990. In fact, alum dosage was maintained at the 60 mg/l level until June 1991 when it was increased to the 70-80 mg/l range (see Figure 1). Polymer dosages were kept at 1.2 mg/l in August 1990 and have since increased to 1.8 mg/l (see Figure 2). There has not been any attempt by the plant whatsoever to reduce chemical dosages post August 1990.

Comparison with Samoa Packing's Treatment System

Comparisons of the treatment plant removal efficiencies between StarKist Samoa and Samoa Packing have been made by the regulatory agency in its 13 August 1991 letter to StarKist Samoa. It should be noted that StarKist Samoa's DAF unit has consistently achieved a much higher level of TP removal efficiency than Samoa Packing due to its addition of both polymer and alum.

With respect to Samoa Packing's higher TN removal efficiency as stated in EPA's August 13th letter, it should also be noted that Sampac's fish thawing process is different from that of StarKist's. Sampac recycles its thaw water which is made up of city water. StarKist uses once through sea water for thawing. The process at Sampac probably yields a much higher level of nitrogen loading in the influent than at StarKist's. This would certainly account for Sampac's ability to consistently meet the 35 percent removal requirement.

Validity of StarKist Samoa's TN and TP Data

All of StarKist Samoa's influent and effluent analyses for Total Nitrogen and Total Phosphorus are performed by AECOS - a qualified commercial laboratory in Honolulu - which met US EPA's DMR-QA Evaluation Study 011 for TP and TN.

DRAFT
FOR DISCUSSION
ONLY**Decreasing Trend in Nutrient Loadings to the Harbor**

The loadings of TP and TN (measured in pounds per day) into the Pago Pago Harbor have been steadily decreasing. The August 1991 Total Nitrogen loading to the Bay was reduced to only 60 percent of the absolute loading limit of 1,675 #/day.

Conclusions

A review of the plant's operational data did not reveal any operational problems. This is substantiated by the consistently high removal efficiencies for TSS, O&G, TP and particulate nitrogen.

d:\wei\samoa\daf

DRAFT

Table 1: Analysis of Soluble Nitrogen in StarKist Samoa's wastewater (August 1991)

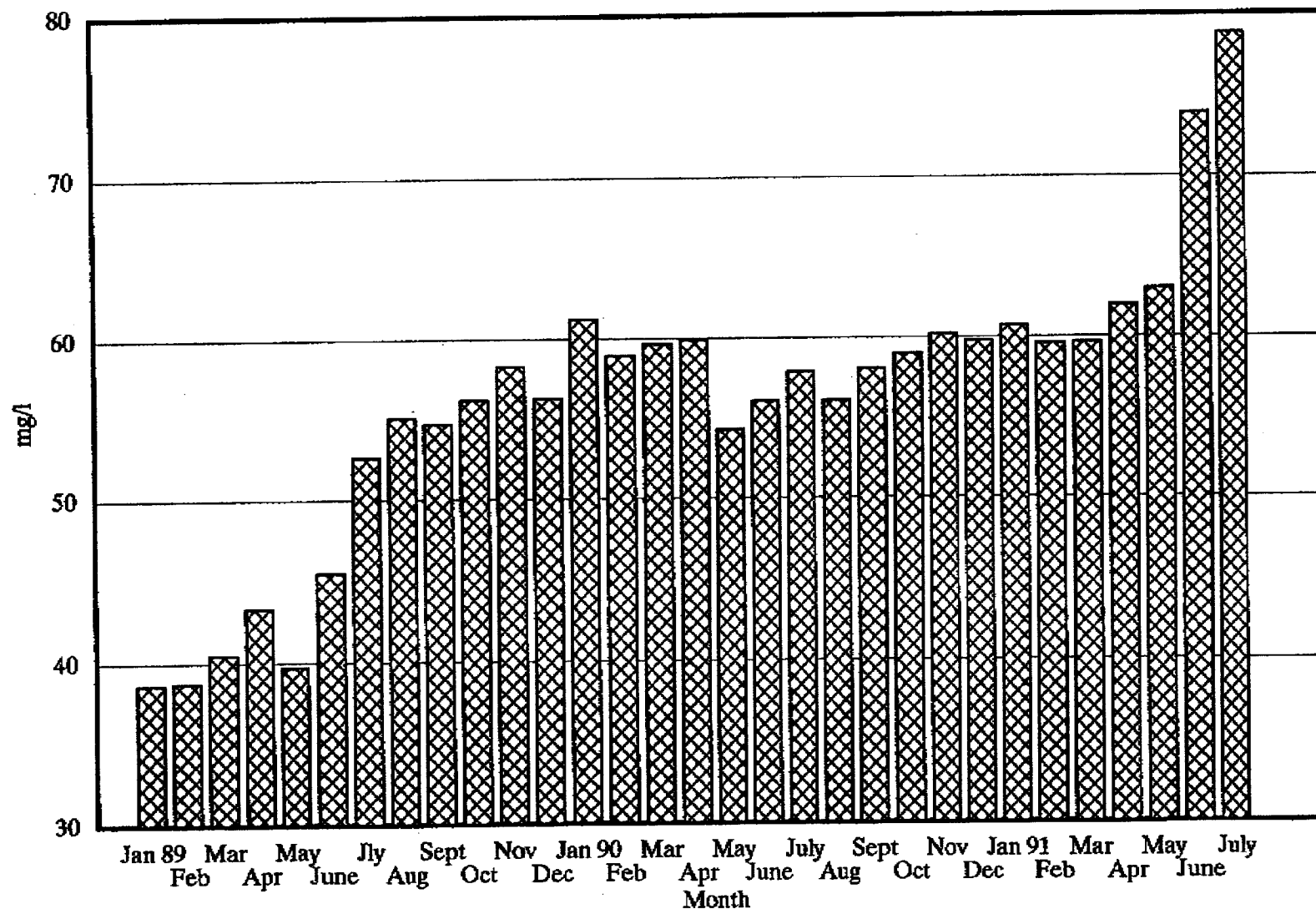
		Total Nitrogen				Soluble TN				Particulate TN				
Date	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day	Influent mg/l	Percent Soluble	Effluent mg/l	Percent Soluble	Influent #/day	Effluent #/day	Influent #/day	Effluent #/day	Percent Removal
Aug 1	1.5501	188.00	122.00	2423	1573	124.0	66%	110.0	90%	1598	1418	825	155	81.25%
Aug 6	1.3128	111.00	94.00	1212	1026	84.2	76%	80.3	85%	919	877	293	150	48.88%
Aug 8	1.1950	157.00	114.00	1560	1133	110	70%	94.1	83%	1093	935	467	198	57.66%
Aug 14	1.4700	91.30	98.90	1116	1209	64.8	71%	82.7	84%	792	1011	324	198	38.87%
Aug 16	1.2132	122.00	107.00	1231	1080	90.5	74%	91.1	85%	913	919	318	160	49.52%
Aug 20	1.4589	125.00	87.60	1517	1063	85.7	69%	68.9	76%	1040	812	477	251	47.33%
Aug 22	1.3643	100.00	88.50	1135	1004	79.8	80%	72.9	82%	905	827	229	177	22.77%
Aug 29	1.4072	102.00	47.30	1194	554	74.3	73%	48.7	103%	869	570	324	-16	105.05%
Aug 30	1.0617	84.70	72.30	748	638	55.3	65%	68.4	95%	488	604	260	34	86.73%
Average	1.3370	120.11	92.40	1348	1031	85.40	72%	79.46	82%	958	836	391	145	62.72%
Maximum	1.5501	188.00	122.00	2423	1573	124.00	66%	110.00	90%	1598	1418	825	155	105.05%

Particulate TN = Total TN - Soluble TN

8590

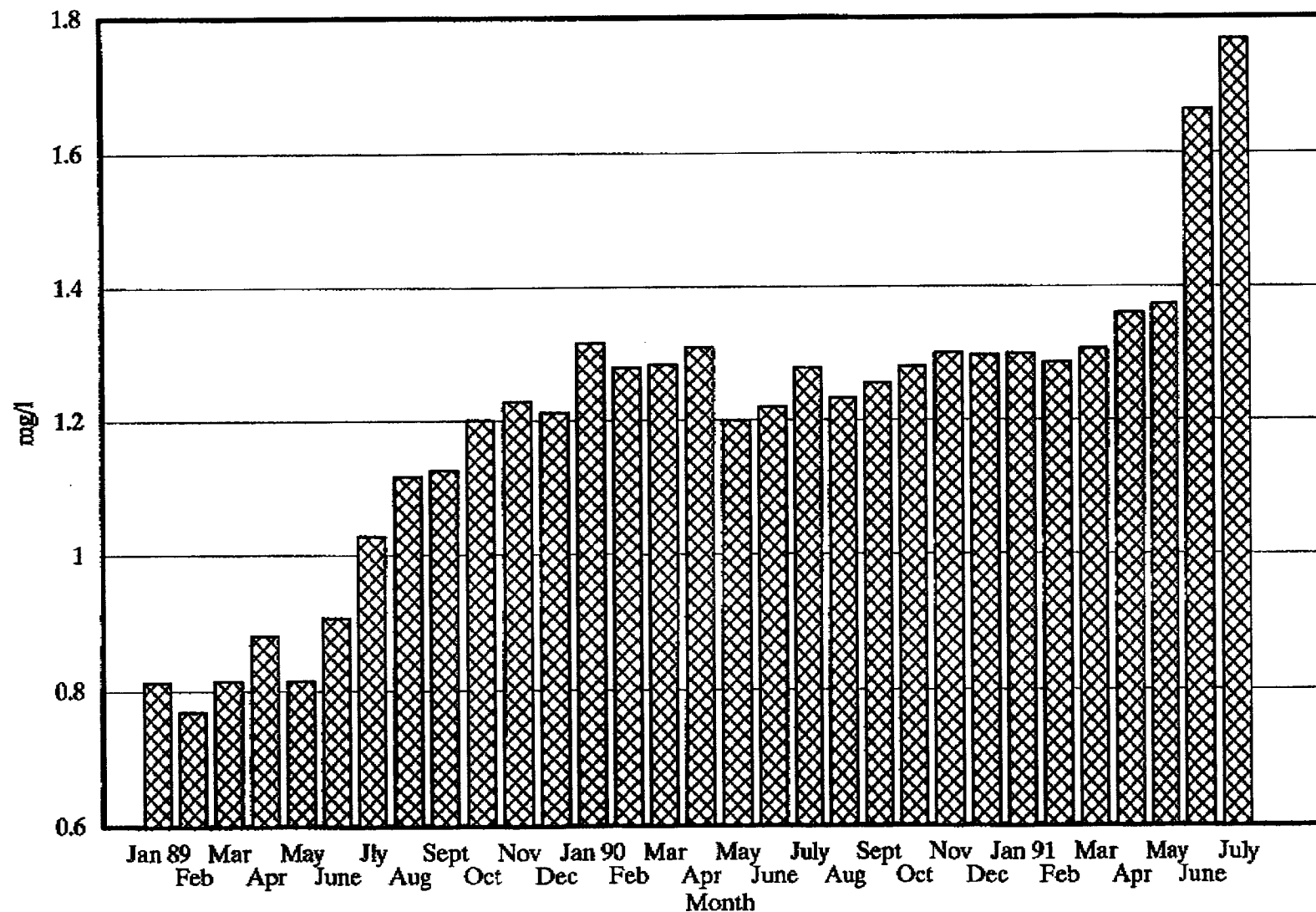
Figure 1: Average Monthly Alum Dosage (mg/l)

StarKist Samoa



DRAFT

Figure 2: Average Monthly Polymer Dosage (mg/l)
StarKist Samoa



StarKist Seafood Company

An Affiliate of H.J. Heinz Company



Copy to Mike
180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900
N *Pat*

August 22, 1991

Mr. Norman Lovelace (E-4)
OPINAP
U.S. Environmental Protection Agency
75 Hawthorn Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: StarKist Samoa's Source Reduction Program

Pursuant to your request as stated in Mr. Seraydarian's letter of August 13, 1991, please find enclosed a copy of StarKist Samoa's report on its Source Reduction Program.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

Attachment

cc: Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

STARKIST SAMOA'S SOURCE REDUCTION PROGRAM

AUGUST 22, 1991

This report is prepared in response to U.S. EPA's request for information on StarKist Samoa's source reduction program.

The program consists of the following components:

Phosphate-free Detergent

The plant switched to using phosphate-free detergents for plant washdown in early 1990. This reduces the phosphorus loadings to the treatment plant.

Reduction of City Water Usage

Since August of 1990, the plant has reduced its usage of city water for plant washdown by using squeegees as much as possible instead of water hoses. The overall water usage per unit of production has been on a steady downward trend as shown in the attached figure. The effect of this program is that less scrap is being washed down to the treatment plant.

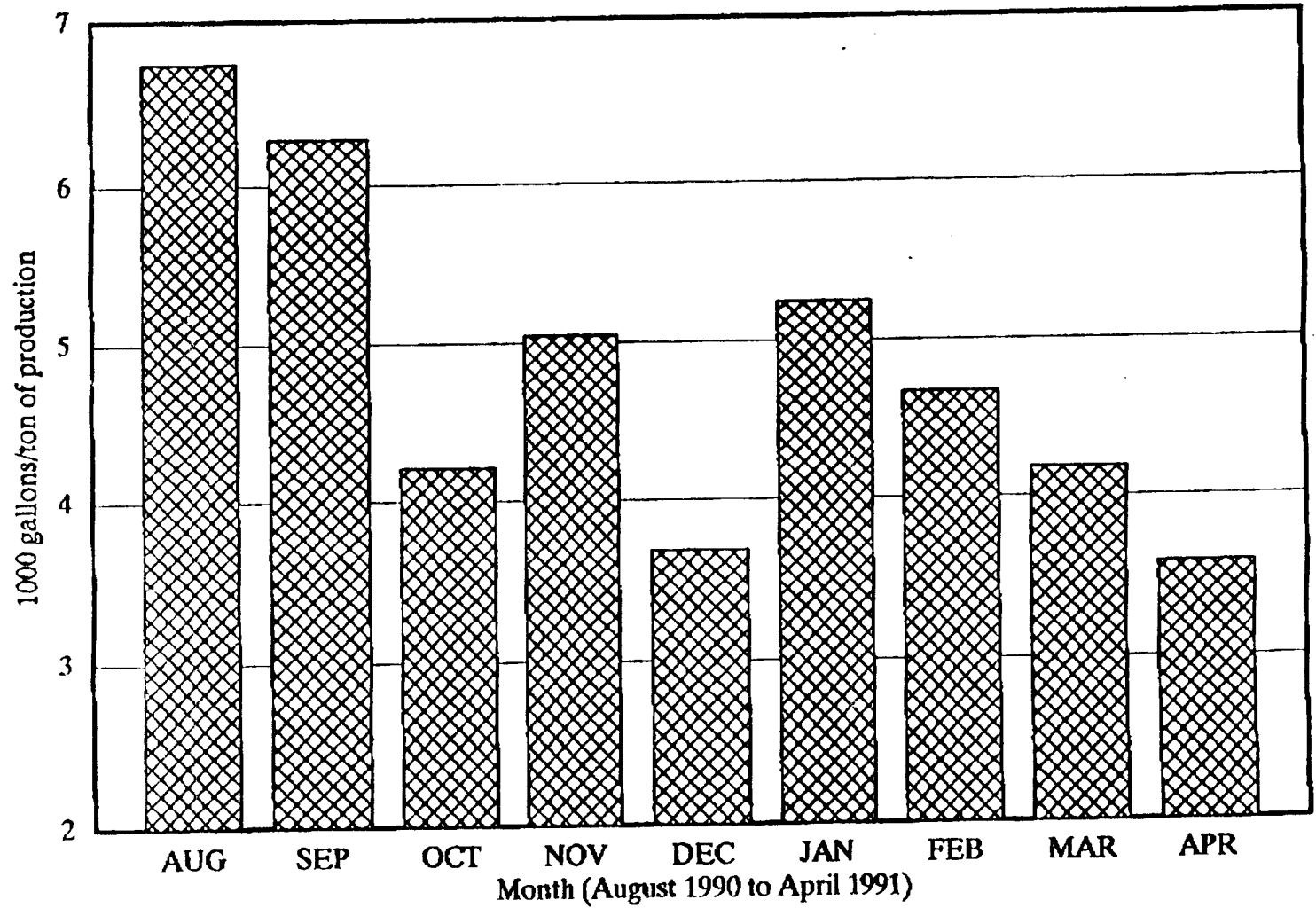
Vacuum Cleaning System

An industrial strength vacuum system was ordered on February 28th, 1991 for testing. The unit arrived in American Samoa in May. Receptacles throughout the plant are being retrofitted to ensure proper and safe electrical grounding. This unit is a ten horsepower system capable of picking up fish scrap from the packing room floor and transferring the material via a loader to the fishmeal plant. Solids loading to the wastewater treatment plant is expected to be reduced accordingly. Testing of the vacuum unit is scheduled for late August. If the unit proves to be successful after two weeks of testing, the plant plans to purchase two additional ones - one for the fishmeal plant and the other in the filling room and as a back-up. The net effect would be significant reduction of nutrient loadings to the treatment plant.

Fishmeal Plant Modifications

A new hopper has been installed at the fishmeal plant so that the wet meal can be tipped directly into the screw conveyor system. This reduces the amount of fish scrap and nutrients that goes into the wastewater treatment plant. Senior management is considering the installation of a new fishmeal plant which would further reduce the loadings on the wastewater treatment plant.

Water Usage at StarKist Samoa



samoa_c\water

Rec'd 5/6/91
my
Copy to Mike



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

May 1, 1991

Mr. Norman Lovelace
OPINAP (E-4)
U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Lovelace:

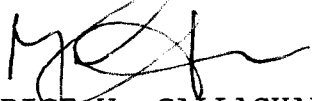
Re: Selection of Disposal Method

In accordance with the requirements of its Consent Decree with the American Samoa Government, StarKist Samoa Inc. hereby notifies the Government and the High Court of American Samoa that the canneries (StarKist Samoa and Samoa Packing) plan to discharge their treated effluents jointly through a 7,000 foot marine pipeline to be constructed in the Pago Pago Harbor.

Based on the findings and recommendations contained in CH₂M Hill's engineering feasibility study dated March 1991, the canneries are confident that this selected disposal method will meet all applicable water quality standards at the edge of a government approved mixing zone.

Respectfully submitted,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

MWC:tl

cc: B. Adams
N. Wei
R. A. Ward



AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799

In reply refer to:

OFFICE OF THE ATTORNEY GENERAL

Serial: 1152-91

August 5, 1991

Maurice Callaghan
President and General Manager
Starkist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

Pursuant to reports filed by you and as verified by the American Samoa Environmental Quality Commission, the following violations of effluent limitations under Appendix A to the Consent Decree filed in the matter of ASG v. Starkist, C.A. No. 65-90, have been recorded:

<u>Date</u>	<u>Parameter</u>	<u>Type</u>	<u>Effluent Limitation</u>	<u>Actual Discharge</u>
3/20/91	Nitrogen	Daily Maximum	1305 lb/day	1379 lb/day ✓
3/22/91	Nitrogen	Daily Maximum	1305 lb/day	1346 lb/day ✓
4/9/91	Nitrogen	Daily Maximum	1465 lb/day	1545 lb/day ✓
4/19/91	Nitrogen	Daily Maximum	1465 lb/day	1687 lb/day ✓
3/91	Nitrogen	Monthly average	807 lb/day	972 lb/day ✓
4/91	Nitrogen	Monthly average	1115 lb/day	1198 lb/day ✓
5/91	Nitrogen	Monthly average	1421 lb/day	1481 lb/day

Maurice Callaghan
Serial No. 1152-91
Page - 2

The stipulated penalty per violation of the daily maximum effluent limitation is \$1,000 each, for a total of \$4,000. The penalty for failure to comply with the monthly average limitation is \$10,000 for the first month, \$15,000 for the second month, and \$20,000 for the third month, for a total of \$45,000. All penalties to date total \$49,000.

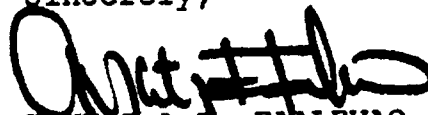
I regret to have to call to your attention paragraph V.H. of the Consent Agreement which states:

"Any stipulated penalties incurred by defendant shall be paid without demand by defendant's check, made payable to the American Samoa Government... by the 30th day of the month following the month in which... the limitation was exceeded."

As you know, these provisions were incorporated into the Opinion and Order of the High Court of American Samoa signed on August 3, 1990.

The fines accrued by Starkist are overdue. I will not hesitate to invoke the powers of the court to enforce its Order if payment of the fines accrued to date is not immediately made.

Sincerely,


TRUTAI A.F. FAALEVAO
Attorney General

VLG:fst

cc: The Governor
Wm. Dyke Coleman, Chairman, EQC
Pati Faiai, Director, ASEPA
Virginia L. Gibbons, Assistant Attorney General
EPA Region 9 ←

8/27/91

Memo to the file

From: ^{Pax} Pat Young, American Samoa Program Manager

Telecon w/Norman Wei, StarKist

Norman called regarding guidance on NPDES permit application for StarKist's outfall 002 which is a stormwater discharge. They are in the process of filling out an application for the new joint canneries' outfall and he wanted to know:

1. Has the deadline for applying for industry-related stormwater discharge permits been extended as indicated under the proposed rule, from November 1991 to May 1992?

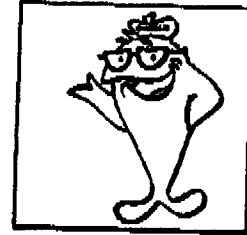
2. If StarKist has to do stormwater characterization as indicated under the proposed rules, they can meet the May 1992 deadline, but can't submit the information with the present application (they're trying to meet a September deadline). Also this appears to be a lot of work.

I called Eugene Bromley and explained the situation and questions. He said that while the canneries are covered under the industry-related stormwater regs under these circumstances, StarKist should apply for its permit using the normal procedures, as the existing stormwater discharge is already covered under the existing permit. In the future, if StarKist has more stormwater discharge sources, they will be covered under the new general permit EPA will be issuing, which will include the islands. Thus, SK doesn't have to do any stormwater characterization study.

I relayed this information back to Norman Wei. He asked if they had to provide information as indicated in the permit application for TSS, BOD, etc. for their stormwater discharge. They don't have this information as they were not required to monitor for this under the existing permit. We agreed that they should provide whatever information they've submitted with the DMRs, with an explanation, and we'll see if that is sufficient. I told him that this made sense since we are mainly interested in the joint outfall.

cc: Mike Lee

StarKist Seafood Company
Facsimile Transmittal



DATE: 20 August, 1991
TO: Pat Young (E-4)
US EPA Region 9
FROM: Norman Wei
FAX Number:

Number of pages including cover sheet: 3

Our Fax Number is (213) 590-3882

If you have not received all pages of this transmittal
please call Norman Wei at (213) 590-3873

=====

Special Messages:

Per our discussions. Thanks

x2049
sent to Jan Fraser
8/20/91
mg

3 weeks
delay

→ but being investigated

→ need orig. sign. - someone from
PRC will call Norman Wei

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

GSA Approved. OMB No. 2050-0028. Expires 10-31-91
GSA No. 0246-EPA-OTDate Received
(For Official Use Only)

[X]												[]											
STARKIST												SAHOA INC											
PO BOX												368											
PAGO												PAGO											
AS												96799-											
PO BOX												368											
PAGO												PAGO											
AS												96799-											
CALLAGHAN												MAURICE											
GENERAL												MANAGER											
694												-644-4231											
[X]												PO BOX 368											
PAGO												PAGO											
AS												96799-											
STARKIST												SEAFOOD COMPANY											
180												E OCEAN BLVD											
LONG												BEACH											
CA												90802-											
213-590-3873												S P X											

A. Characteristics of Nonlisted Hazardous Wastes. Mark "X" in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. (See 40 CFR Parts 261.20 - 261.24)

[] [] [] [] [] [] [] [] [] []

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33. See instructions if you need to list more than 12 waste codes.)

F005 [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

[] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

C. Other Wastes. (State or other wastes requiring an I.D. number. See instructions.)

[] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature 	Name and Official Title (type or print) GENERAL MANAGER	Date Signed 4-15-91
---------------	--	------------------------

Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)

StarKist Seafood Company

An Affiliate of H.J. Heinz Company



27 AUG 1991 *in*

Copy to Mike
180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900

August 20, 1991

Mr. Tautai A. F. Fa'alevao
Attorney General
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Attorney General,

Further to your letter of August 5 1991, attached is our Check in the amount of \$49,000 being stipulated penalties covering the period March, April and May 1991.

We have now received modified interim effluent limitations from EPA in San Francisco reducing the removal efficiency requirement from 35% to 25% effective August 1 1991.

StarKist Samoa is continuing to do its utmost to meet these limitations and this is evidenced by various inplant improvements we have made.

Also attached is our Check in the amount of \$11,000 being in respect of July violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: The Governor
Wm Dyke Coleman, Chairman EQC
Pati Faiai, Director ASEPA
Virginia Gibbons, Assistant Attorney General
Norman Lovelace, EPA Region 9

Wm Adams
R. Higgins
R. A. Ward
N. Wei
T. Liaiga



Star-Kist Samoa, Inc.

PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

AMERICAN SAMOA BRANCH
BANK OF HAWAII
PAGO PAGO, TUTUILA
AMERICAN SAMOA 96799

No. 75668

101-400
1214

8/20/91

NOT VALID AFTER 60 DAYS

PAY
TO THE
ORDER
OF

The amount of \$11,000.00

☆ AMERICAN SAMOA GOVERNMENT (TREASURER)
C/- OFFICE OF ATTORNEY GENERAL
PAGOPAGO AMERICAN SAMOA

GENERAL ACCOUNT

Meloma F. Alualo

⑆⑆2⑆404006⑆ 0034⑆003939⑆

DATE	REFERENCE	GROSS AMOUNT	DISCOUNT	PREVIOUS BALANCE	BALANCE	REMARKS
	EPA VIOLATION FOR JULY			\$11,000.00		
	CHECK NO. 75668 AND VOUCHER NO. 40861					
					<i>MC</i>	

PLEASE DETACH
THIS REMITTANCE ADVICE
BEFORE DEPOSITING CHECK

STAR-KIST SAMOA, INC.
PAGO PAGO, TUTUILA, AMERICAN SAMOA

THE ATTACHED CHECK
IS IN PAYMENT OF THE
ITEMS LISTED ABOVE



Star-Kist Samoa, Inc.

PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

AMERICAN SAMOA BRANCH
BANK OF HAWAII
PAGO PAGO, TUTUILA
AMERICAN SAMOA 96799

101-400
1214

No. 75666

8/16/91

NOT VALID AFTER 60 DAYS

PAY
TO THE
ORDER
OF

The sum of 49,000 U.S. Dollars

☆ AMERICAN SAMOA GOVERNMENT (TREASURER)
C/- OFFICE OF ATTORNEY GENERAL
PAGO PAGO AMERICAN SAMOA

GENERAL ACCOUNT

Tavayin Fhienings

⑆121404006⑆ 0034⑈003939⑈

DATE	REFERENCE	GROSS AMOUNT	DISCOUNT	PREVIOUS BALANCE	BALANCE	REMARKS
		EPA VIOLATION		\$49,000.00		
		CHECK NO.	75666 AND	VOUCHER NO.	40798	

PLEASE DETACH
THIS REMITTANCE ADVICE
BEFORE DEPOSITING CHECK

STAR-KIST SAMOA, INC.
PAGO PAGO, TUTUILA, AMERICAN SAMOA

THE ATTACHED CHECK
IS IN PAYMENT OF THE
ITEMS LISTED ABOVE



AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799

In reply refer to:

**OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY COMMISSION
Serial:300**

June 7, 1991

Maurice Callaghan
General Manager
Star Kist Samoa
P. O. Box 468
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

The Environmental Quality Commission (EQC) has considered your request dated March 7, 1991, for a variance of temperature limitations for discharges to Pago Pago Harbor. A public notice on this variance request was issued and no comments were received. The EQC approved the variance on April 10, 1991, after finding 1) the discharge at a temperature of 90 degrees Fahrenheit will not endanger human health or safety; 2) compliance with the temperature limitation will likely produce serious hardship without equal or greater benefits to the public; and 3) the relative interests of the public, other property owners, and the applicant were considered.

This variance will allow the discharge of treated effluent from the outfall at 90 degrees Fahrenheit until March 8, 1992. Reporting as required in the National Pollutant Discharge Elimination System permit for this outfall will be utilized to determine compliance with the variance.

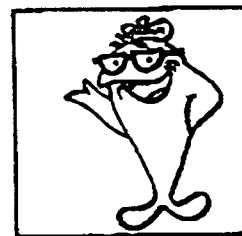
Please feel free to contact me if you have any questions or require any additional information.

Sincerely,

Pati Faiai, Executive Secretary
Environmental Quality Commission

cc: Pat Young, USEPA
ASEPA Environmental Coordinator ←
ASEPA Enforcement Branch

StarKist Seafood Company
Facsimile Transmittal



DATE: 20 December, 1991
TO: Mike Lee
US EPA Region 9
FROM: Norman Wei
FAX Number:

Number of pages including cover sheet: 6

Our Fax Number is (310) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (310) 590-3873**

=====

Special Messages:

Mike:

Per our telecon, please advise how we should proceed. Our existing permit does not require us to do any toxicity tests. Should we hold off until the new permit is issued?

Norman



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 2 1991

OFFICE OF WATER

Dear NPDES Permit Holder:

The U.S. Environmental Protection Agency (EPA) and States are continuing an expanded quality assurance (QA) program in 1992 for all major permittees under the National Pollutant Discharge Elimination System (NPDES), which includes both the chemistry and aquatic toxicity tests. The purpose of this program is to evaluate the analytical and reporting ability of permittee laboratories for chemical and whole-effluent toxicity self-monitoring data. Participation in this program is required based on the authority of Section 308(a) of the Clean Water Act. I wish to express my appreciation to those permittees who have participated in past years.

The twelfth annual study will include eight toxicity test organisms: fathead minnow, *Ceriodaphnia dubia*, *Daphnia magna*, *Daphnia pulex*, rainbow trout, mysid, silversides, and sheepshead minnow. If your permit requires acute and/or chronic toxicity tests with one or more of these test organisms, regardless of the specific test conditions described in your permit, you are required to complete the enclosed toxicity test information form and participate in the toxicity test performance evaluation. Please alert your biomonitoring support laboratory(ies) about the planned toxicity test performance evaluation as soon as possible, and plan for the appropriate toxicity test(s).

In Study 12, the performance evaluation (PE) samples will again be delivered in two separate sets. One is the toxicity set, containing the sample(s) required for toxicity testing. This set will be sent directly to the biomonitoring support laboratory (or laboratories) designated by you (on the attached form) to perform the required toxicity testing. The second is the chemistry set similar to those for previous studies, which will be sent directly to you and must be analyzed for any of the available inorganic analytes that are monitored under your permit.

Please note that the toxicity tests and chemical analyses performed with the PE samples must be carried out using the in-house and/or contract laboratory personnel normally employed in generating your NPDES self-monitoring data.

Toxicity Sample Set

Approximately 60 days after you receive this letter, the toxicity sample sets and instructions for preparing the samples, performing the toxicity tests, and reporting the data, will be sent directly to the biomonitoring support laboratory(ies) that you identify on the enclosed "Permittee Toxicity Test Information" form. For this reason, it is essential that you mail the completed form to the Bionetics Corporation within *three weeks*.

Printed on Recycled Paper

- 2 -

The toxicity test laboratories will be instructed to send one set of results for each type of toxicity test they perform directly to the Bionetics Corporation. The laboratories will also send results to each of their client permittees for those toxicity tests specifically requested by the permittee. The permittee will then report these toxicity data, together with the chemistry data, to the Bionetics Corporation using the forms included with the chemistry sample sets.

Chemistry Sample Set

Approximately 60 to 90 days after you receive this letter, the chemistry sample sets and instructions for preparing the samples will be sent. This package will be sent to all permittees and will contain instructions for reporting both chemistry and toxicity data.

Address Correction Information

To insure expeditious delivery of the study materials, we need complete mailing and shipping addresses, if different. A street address is needed to allow delivery of the sample sets by the United Parcel Service. If the address to which this letter was sent is incorrect, or if the address contains only a P.O. Box number, please provide the correct address(es) using the attached form. This information, together with the information on the toxicity tests required by your NPDES permit, must be entered on the enclosed form, "Permittee Toxicity Test Information," and mailed within three weeks to:

Michele Shirley
The Bionetics Corporation
16 Triangle Park Drive
Cincinnati, Ohio 45246
Phone: (513) 771-0453 (Between 9:00 am and 4:00 pm EST)

If you have any questions, please write or call your State/Regional QA Coordinator whose name, address and telephone number are found on the enclosed list. Please cite your NPDES permit number on all inquiries. We appreciate your cooperation in this program.

Sincerely yours,



Michael B. Cook
Director
Office of Wastewater Enforcement
and Compliance

Enclosures

**NPDES STUDY 12
PERMITTEE TOXICITY TEST INFORMATION**

Complete and return to The Bionetics Corporation
if your current permit requires toxicity tests.

1. FEDERAL NPDES PERMIT NO:

(State abbrev. and seven digit number)

2. PERMITTEE MAILING ADDRESS:

SHIPPING ADDRESS, IF DIFFERENT

(Company) _____
(Name/Title) _____
(Address) _____
(City) _____ (State) _____ (Zip) _____
PHONE NO: () _____

3. TOXICITY TESTS REQUIREMENTS:

Listed below are the organisms that are proposed for testing, in the upcoming NPDES P.E. study. Check the appropriate boxes on the form below and provide the requested information on the effluent toxicity tests required by your current permit (regardless of whether or not you are currently required to provide toxicity data to the permitting authority). Submit the names of the laboratories that you are currently using to perform your toxicity testing or whom have last performed the tests.

Attach a list including the complete names, mailing addresses (and shipping addresses, if different), and phone numbers of the inhouse and/or contract performing laboratories identified by name on the form.

NOTE: If your permit requires toxicity testing in the future, provide the information on the test types, but insert the response, "not yet selected," in the appropriate blank(s) for the performing laboratory.

CHECK BOX (List only one laboratory per test.)

☐ Fathead minnow (*Pimephales promelas*) acute test:

Name of performing laboratory: _____
(Attach and submit the Laboratories address, on a separate page.)

☐ Fathead minnow (*Pimephales promelas*) chronic test:

Name of performing laboratory: _____
(Attach and submit the Laboratories address, on a separate page.)

☐ *Ceriodaphnia dubia* acute test:

Name of performing laboratory: _____
(Attach and submit the Laboratories address, on a separate page.)

☐ *Ceriodaphnia dubia* chronic test:

Name of performing laboratory: _____
(Attach and submit the Laboratories address, on a separate page.)

Return To:
Michele Shirley
The Bionetics Corporation
16 Triangle Park Drive
Cincinnati, Ohio 45246

(Continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY

NPDES STUDY 12
TOXICITY TEST TYPES AND PERFORMING LABORATORIES (CONTINUED)CHECK BOX (List only one laboratory per test.)☐ Mysid (*Mysidopsis bahia*) acute test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Mysid (*Mysidopsis bahia*) chronic test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Silversides (*Menidia* s.p.) acute test: (List the species): _____

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Silversides (*Menidia* s.p.) chronic test: (List the species): _____

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ *Daphnia magna* acute test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ *Daphnia pulex* acute test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Sheepshead minnow (*Cyprinodon variegatus*) acute test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Sheepshead minnow (*Cyprinodon variegatus*) chronic test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

☐ Rainbow trout (*Oncorhynchus mykiss*) acute test:

Name of performing laboratory: _____

(Attach and submit the Laboratories address, on a separate page.)

Return To:
Michele Shirley
The Bionetics Corporation

U.S. ENVIRONMENTAL PROTECTION AGENCY

NPDES STUDY 12
PERMITTEE TESTING REQUIREMENTS AND ADDRESS CORRECTION FORM
(Please do not submit, if there are no changes required)

Testing Requirements:

Please review the address label affixed to this letter for your designated testing status, either CHEM or TOX, or both. This indicates what testing requirements you will be performing for the study, however compare these designations to your permit, if there is a discrepancy please contact your State Coordinator and make the changes below.

Mark YES or NO for your current testing requirements, if different then the affixed label.

_____ Chemistry, _____ Toxicity
(Inorganic, only) (if YES, see PERMITTEE TOXICITY TEST INFORMATION FORM)

Current Permittee Address:

If the current address to which this letter is sent is incorrect, please make the correct address changes below. To avoid confusion of having some information mailed and others shipped, we would like to have only one contact who will receive all of the information for the study.

A shipping and mailing address are required.

Permittee Address Change:
(If different than current permittee address)

Federal NPDES Permit Number (only) _____
Facility Name: _____
Attention: _____
(Title and/or Name)

Mailing Address:
P.O. Box/Street: _____
City, State and Zip Code: _____

Shipping Address:
Street: _____
City, State and Zip Code: _____

Return To:

Michele Shirley
The Bionetics Corporation
16 Triangle Park Drive
Cincinnati, OH 45246

Office Use Only
Updated File: _____ DMR.DBF _____ TOX.DBF
Date Changed: _____ By _____
Comments: _____
ADMINISTRATIVE _____



*Copy to Mike,
Doug*

March 3, 1992

Mr. Norman Lovelace
OPINAP
Environmental Protection Agency
Region 9, Attn: E-4
75 Hawthorne Street
San Francisco, California 94105

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Pago Pago, American Samoa 96799

Subject: Toxic Substance Monitoring Program
NPDES Permit No. AS0000019

StarKist Samoa hereby submits the following monitoring data as required under the Toxic Substance Monitoring Program of the above referenced NPDES Permit:

	<u>Supply Water</u> <u>(Thaw Water)</u>	<u>Effluent</u>
Cadmium	< 0.01	< 0.01
Chromium	< 0.03	< 0.03
Lead	< 0.01	< 0.01
Mercury	0.0040	0.0004
Zinc	0.045	0.105

All concentrations above are reported as parts per million. Samples were collected on January 31, 1992 and analyzed by AECOS the week of February 17th.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

Page 2
March 3, 1991

information, including the possibility of fines and imprisonment
for knowing violations.

Yours truly,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: N. Wei
R. A. Ward
W. Adams

DEC 09 1992

Copy to Mike



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

December 1, 1992

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

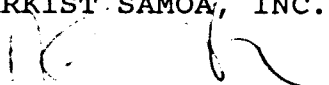
Re: Monitoring Results for the Months of September and October
under the U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the months of September and October 1992. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/t1

Attachments

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Wastewater Summary Report for the Month of September 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	489.656	1.2155	1,008	27.1	79	6.9	7.3	12.3	124	51.0	516	3.27	33	70.8	716	30.9
2	467.347	1.1697	960	25.8	78	6.9	7.2									
3	485.802	1.1711	996	26.8	80	6.9	7.2	15.2	148	65.5	638	3.83	37	70.7	689	
4	442.518	1.2632	1,082	28.4	76	7.1	7.2									
5	484.351	1.0502	936	25.2	80	7.0	7.2									
6		0.4421	336	9.5	83	6.8	7.0									
7		0.5849	420	12.6	78	6.5	6.8									
8	465.454	1.2012	1,056	28.4	82	6.6	7.1									
9	490.215	1.0701	936	25.2	76	6.5	7.0	21.0	187	41.5	369	5.51	49	92.7	828	30.2
10	497.259	1.2872	1,080	29.0	74	6.6	7.3									
11	463.988	1.3329	1,140	30.9	80	6.5	7.1	8.6	95	49.0	543	3.05	34	74.8	829	
12	434.988	1.1569	960	26.5	80	6.8	7.3									
13		0.9035	816	15.8	85	7.0	7.3									
14	443.780	1.2277	1,020	27.7	80	6.7	7.2									
15	490.135	1.4347	1,176	32.0	77	6.8	7.0	9.9	118	69.0	823	4.54	54	70.8	845	24.4
16	472.839	1.3608	1,176	31.5	82	6.8	7.2	4.0	45	101.5	1,149	2.03	23	44.9	508	
17	458.858	1.4161	1,200	32.4	82	6.9	7.3									
18	456.151	1.1658	984	26.8	76	6.5	7.3									
19		0.3277	300	8.2	88	6.7										
20		0.1289	108	3.2	80	7.0										
21		0.1597	144	4.7	85	6.6										
22		0.2190	180	5.6	80	7.2										
23		0.1593	120	3.8	79	7.4										
24		0.3410	216	6.3	78	7.4										
25																
26		0.0554	36	1.3	80	6.9	7.3									
27		0.5783	420	12.0	80	6.6	7.3									
28	404.249	1.1200	912	24.6	88	6.9	7.3									
29	382.334	1.0922	984	26.0	78	6.5	7.3									
30	433.937	1.3706	1,176	31.5	79	6.5	7.3									
TOT.	8102.918	28.0057	21,878	588.8				71.0	718	377.5	4,038	22.2	230	424.7	4411	
Max	490.888	1.4347	1,200	32.4	88	7.4	7.3	21.0	187	101.5	1,149	5.5	54	92.7	845	30.9
AVG	485.182	0.8967	754	20.3	80			11.8	120	62.9	673	3.7	38	70.8	736	

Wastewater Summary Report for the Month of **October 1992**

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	444.478	1.1580	1020	27.7	84	6.5	7.0	51.8	499	52	501	6.96	67	77	742	33.7
2	430.375	0.9771	840	22.7	83	6.7	6.9	8.9	72	63	512	3.73	30	89.3	726	
3		0.2618	216	6.3	88	6.5	7.2									
4		0.7065	540	18.6	84	6.6	7.2									
5	408.989	1.0929	900	26.8	78	7.1	7.3									
6	460.922	1.3489	1200	35.3	78	7.0	7.3	15.8	177	74	830	5.09	57	55.4	621	26.9
7	458.736	1.3386	1164	34.7	77	6.8	7.1	43.7	486	69	768	5.5	61	65.5	729	
8	437.194	1.2035	1008	26.8	78	6.6	7.2									
9	443.872	0.8469	600	17.0	78	6.7	7.2									
10		0.3524	276	7.6	87	6.5	7.0									
11		0.7515	552	15.1	84	6.5	6.9									
12	420.075	1.0608	840	23.0	76	7.0	7.3									
13	429.687	1.1291	888	23.6	77	6.7	7.3	5.0	47	36	338	2.91	27	63.2	599	24.1
14	447.827	1.1750	864	23.6	81	6.7	7.2	4.7	46	39.5	386	3.44	34	56.2	549	
15	451.770	1.1850	900	24.6	82	7.0	7.2									
16	418.426	0.8893	684	18.9	81	7.1	7.2									
17		0.3451	264	7.9	90	6.5	6.8									
18		0.5712	432	12.3	82	6.9	7.1									
19	427.777	1.0517	876	23.6	78	6.6	7.1									
20	446.738	1.0897	864	23.6	78	7.0	7.3									
21	415.043	1.0638	840	22.7	80	6.6	7.2	21.5	190	38	336	6.11	54	68.1	602	36.9
22	487.455	1.2289	1032	27.7	80	6.6	7.5	20.5	210	55.5	567	2.39	24	65.8	672	
23	412.606	0.9612	660	18.3	82	6.9	7.2									
24		0.3962	240	7.2	90	7.1										
25		0.4364	324	9.5	84	7.2										
26	442.417	1.1184	864	23.6	80	6.8	7.3									
27	440.845	1.1872	900	24.6	76	6.7	7.0	6.4	63	44.5	439	3.21	32	66.8	658	25.0
28	477.554	1.1717	876	23.9	80	6.7	7.1	24.1	235	48	468	3.35	33	66.4	647	
29	443.133	1.2037	960	25.8	78	6.9	7.2									
30	448.156	1.1805	876	23.6	84	7.1	7.3									
31		0.3656	264	7.9	90	6.7	7.0									
TOT.	9693.875	28.8486	22764	634.5				202.4	2025	519.5	5,145	42.7	419	673.5	6540	
Max	487.455	1.3489	1200	35.3	90	7.2	7.5	51.8	499	74.0	830	7.0	67	89.3	742	36.9
AVG	440.631	0.9306	734	20.5	82			20.2	203	52.0	515	4.3	42	67.4	654	



September 28, 1992

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of August 1992 under the
U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of August 1992. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/t1

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Wastewater Summary Report for the Month of August 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	412.027	0.9057	720	16.8	79	7.1	7.3									
2		0.4310	324	7.3	87	7.2	7.3									
3	426.982	1.0605	852	20.5	82	7.0	7.2									
4	424.752	1.1949	996	25.2	84	6.8	7.1	39.2	390	88.0	874	4.44	44	86.3	858	44.0
5	444.493	1.3573	1080	27.4	84	7.1	7.2									
6	489.301	1.3030	1104	28.0	79	6.9	7.1									
7	436.440	1.3878	1104	28.4	78	7.0	7.3	6.0	69	69.5	802	5.64	65	87.9	1014	
8	404.064	1.0328	792	20.2	84	6.6	7.2									
9		0.7168	600	15.1	84	6.8	7.0									
10	425.943	1.2330	1008	25.8	78	6.6	6.9									
11	469.155	1.0199	780	18.9	76	6.7	7.3	32.8	278	149.5	1268	4.63	39	93.3	791	41.9
12	433.534	1.1734	900	25.2	78	7.0	7.2									
13	457.677	1.1528	888	23.6	77	6.5	7.2									
14	416.830	1.1826	912	23.9	78	6.5	6.7	21.7	213	47.5	467	4.40	43	76.9	756	
15	201.888	0.8197	672	17.3	86	6.6	6.9									
16		0.7122	600	15.1	78	6.5	7.0									
17	426.690	1.0652	840	22.7	80	6.5	6.7									
18	438.016	1.1541	912	24.6	74	6.6	7.2	32.5	312	124.0	1190	3.79	36	73.5	705	31.8
19	460.959	1.1771	960	23.6	75	7.0	7.4									
20	454.876	1.2270	996	27.1	78	6.8	7.3									
21	440.790	1.1517	986	25.2	80	6.6	7.1	24.4	234	65.0	623	2.88	28	90.6	868	
22	361.635	1.0815	876	23.6	80	6.9	7.3									
23		1.0017	828	23.0	88	6.6	7.0									
24	431.127	1.5388	1248	33.4	80	7.1	7.4									
25	472.930	1.1293	960	25.8	80	7.0	7.3									
26	457.866	1.1648	984	26.5	80	7.0	7.3									
27	472.099	1.1520	948	25.8	82	7.2	7.3									
28	448.660	1.2351	1020	27.1	80	6.9	7.4	59.0	606	135.5	1392	3.01	31	62.2	639	31.2
29	437.922	1.0061	816	22.7	82	6.8	7.2	14.9	125	86.5	724	2.72	23	67.5	565	
30		0.6889	540	13.2	83	7.1	7.3									
31	438.810	1.1520	936	23.6	80	7.0	7.2									
TOT	11185.466	33.6087	27132	706.6				230.5	2227	765.5	7340	31.5	309	638.2	6196	
Max	489.301	1.5388	1248	33.4	88	7.2	7.4	59.0	606	149.5	1392	5.6	65	93.3	1014	44.0
AVG	430.210	1.0842	875	22.8	80			28.8	278	96.7	917	3.9	39	79.8	775	

SEP 10 1992

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company



P.O. Box 368
Pago Pago, Tutuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

August 28, 1992

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of July 1992 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of July 1992. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Attachment

Wastewater Summary Report for the Month of July 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	404.524	1.2922	1032	21.9	81	7.0	7.3	19.2	206	51.5	553	2.74	29	97.0	1042	
2	426.044	0.9767	720	15.8	79	7.2	7.4									
3		0.8821	300	8.1	88	7.2	7.4									
4		0.2803	204	6.1	82	7.2	7.3									
5		0.3913	288	7.7	77	7.1	7.2									
6	407.997	1.0771	840	18.8	80	6.8	7.0									
7	389.884	1.1485	936	20.3	78	6.5	7.0	14.6	139	69.0	859	3.16	30	110.0	1051	26.3
8	436.185	1.1844	924	20.7	78	6.5	6.8									
9	502.160	1.3089	1068	22.1	78	6.6	7.1									
10	431.602	1.4064	1128	22.7	78	6.5	7.0	8.0	94	35.0	409	3.49	41	49.0	573	
11	426.349	1.0205	816	16.2	80	6.6	7.0									
12		0.7471	576	14.2	86	7.0	7.3									
13	430.965	1.0912	840	18.2	80	6.9	7.2									
14	465.236	1.1064	864	19.2	78	6.5	7.0	11.4	105	47.0	432	3.97	37	64.0	589	41.4
15	427.622	1.0814	804	18.2	76	6.5	7.1									
16	447.293	1.2896	1020	20.9	83	6.6	7.3									
17	478.378	1.2136	1008	23.1	80	6.6	7.1	20.7	209	42.0	424	4.28	43	72.0	727	
18	426.693	1.1322	912	20.3	80	6.5	6.8									
19		0.5955	456	12.2	84	7.1	7.3									
20	446.849	1.0405	840	18.6	77	7.1	7.3									
21	439.764	1.1665	948	20.3	74	7.0	7.2									
22	431.887	1.2940	1020	21.3	78	6.6	7.2									
23	447.527	1.1088	900	19.2	80	6.8	7.1	5.7	61	45.0	484	2.61	28	53.0	570	34.9
24	452.164	1.1957	984	21.1	80	6.5	7.0									
25	396.494	1.0788	864	19.2	88	6.6	7.1	20.0	179	67.6	606	3.92	35	70.0	628	
26		0.3904	300	8.1	86	7.2	7.3									
27	441.614	1.0166	840	18.6	80	7.2	7.4									
28	461.749	1.2908	1032	21.5	80	7.0	7.3									
29	461.277	1.3167	1056	22.3	78	6.5	7.3	22.0	241	88.5	969	4.18	46	54.0	591	34.0
30	487.979	1.2474	996	19.8	77	7.0	7.3									
31	429.070	0.9591	744	17.2	81	6.8	7.3	35.3	282	63.6	507	3.40	27	50.0	399	
TOT	10997.306	31.8307	25260	553.9												
Max	502.160	1.4064	1128	23.1	88	6.5	7.4	35.3	282	88.5	969	4.28	46	110.0	1051	41.4
AVG	439.892	1.0268	815	17.9	80			17.4	168	56.6	560	3.53	35	68.8	686	



Copy to Mike

July 31, 1992

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

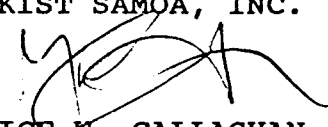
Re: Monitoring Results for the Month of June 1992 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of
June 1992. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of
law that this document and all attachments were prepared under my
direction or supervision in accordance with a system designed to
assure that qualified personnel properly gather and evaluate the
information submitted. Based on my inquiry of the person or
persons who manage the system, or those persons directly
responsible for gathering the information, the information
submitted is, to the best of my knowledge and belief, true,
accurate, and complete. I am aware that there are significant
penalties for submitting false information, including the
possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/t1

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Wastewater Summary Report for the Month of June 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	441.045	0.8580	672	14.2	80	6.7	7.3									
2	467.162	1.2337	960	19.2	82	6.5	7.1	17.4	179	62.5	641	6.6	68	130.0	1334	42.8
3	475.432	1.0494	780	17.2	80	6.7	7.2									
4	458.662	1.3574	1020	19.8	78	6.7	7.2	13.4	151	66.7	753	4.7	53	103.0	1163	52.5
5	457.590	1.2920	960	19.2	78	6.9	7.2									
6	417.419	0.9757	696	15.2	80	7.0	7.2									
7		0.7400	540	11.3	86	7.0	7.1									
8	452.329	1.2733	984	19.8	82	6.8	7.3									
9	464.576	1.1661	840	18.2	78	6.7	7.4	11.8	114	54.5	529	5.7	55	98.0	950	43.1
10	470.179	1.5146	1200	23.3	78	6.8	7.4									
11	488.610	1.2873	996	20.3	77	6.9	7.2									
12	476.485	1.2625	996	21.3	78	6.8	7.2	6.6	69	54.0	567	4.0	42	153.0	1606	54.9
13	427.506	1.1466	888	19.2	82	7.0	7.3									
14		0.6116	480	11.7	84	7.1	7.2									
15	465.843	1.1133	900	19.0	78	7.0	7.2									
16	457.908	1.3198	1032	20.3	76	6.9	7.2									
17	465.476	1.3663	1044	23.3	76	6.6	7.2	19.7	224	81.0	920	2.5	28	70.0	795	34.0
18	470.116	0.9779	768	17.0	78	7.1	7.3									
19	434.731	1.3837	1080	22.3	78	7.1	7.2	21	242	47.5	547	0.9	10	62.9	724	46.9
20	408.788	0.9518	744	16.2	82	7.0	7.3									
21		0.7539	600	13.2	85	6.9	7.3									
22	421.957	1.1731	960	19.2	78	6.6	7.0									
23	442.722	1.2817	1056	21.9	76	6.9	7.2									
24	406.030	1.1959	984	19.8	78	6.9	7.2	8.3	83	114.3	1136	2.5	25	63.2	629	26.9
25	425.426	1.0816	840	18.2	76	7.1	7.4									
26	406.318	1.2552	1020	20.6	78	7.1	7.2	11.2	117	48.0	501	5.2	54	81.1	847	
27	403.522	1.0969	888	19.2	77	7.2	7.4									
28		0.8321	660	14.2	82	7.2	7.3									
29	435.134	1.1059	900	19.4	80	7.1	7.2									
30	445.239	1.0933	864	19.2	79	7.1	7.4	9.6	87	55.5	505	3.3	30	74.7	679	32.5
TOT	11586.205	33.7506	26352													
Max	488.610	1.5146	1200	23.3	86	7.2	7.4	21.0	242	114	1136	7	68	153	1606	54.9
AVG	445.623	1.1250	878	18.4				13.2	127	65	610	4	41	93	970	41.7

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company



June 26, 1992

JUL 07 1992 *Am*
P.O. Box 368
Pago Pago, Tuvalu Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440
Copy to Mike

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of May 1992 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of May 1992. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

Attachment

cc: Mr. Norman Lovelace - US EPA ✓
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Wastewater Summary Report for the Month of May 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Total Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
1	450.693	1.1682	840	18.6	82	6.7	6.9									
2		0.7138	540	12.1	85	6.9	7.1									
3		0.6392	456	11.1	84	6.7	6.9									
4	457.489	1.2689	936	18.6	85	6.8	7.3									
5	421.201	1.5759	1200	25.3	79	6.6	7.1	9.7	127	176	2307	5.1	67	105.0	1376	31.9
6	487.286	1.3664	1032	22.3	82	6.9	7.1									
7	502.324	1.3443	1020	21.3	80	6.7	6.9	4.2	47	73	816	5.1	57	108.0	1207	
8	468.383	1.3910	1056	21.9	86	6.7	7.0									
9		0.7110	528	11.7	90	7.0	7.5									
10		0.9614	720	16.2	82	7.0	7.3									
11	449.115	1.4564	1104	22.7	82	6.9	7.2									
12	476.693	1.2859	960	19.2	80	6.6	7.1	17	182	85.3	912	6.3	67	103.0	1101	
13	460.756	1.5417	1152	21.3	82	7.2	7.4									
14	486.647	1.4167	1080	22.3	82	7.1	7.4	19.7	232	72.5	854	4.3	51	78.1	920	39.8
15	450.962	1.2167	936	18.2	82	6.7	7.1									
16		0.6998	504	13.2	88	6.6	6.9									
17		0.6742	480	11.7	88	6.7	6.9									
18	444.043	1.1158	840	17.2	81	6.9	7.1									
19	470.106	1.4632	1128	23.2	80	6.8	7.2	8	97	44.5	541	3.2	39	77.1	938	21.2
20	507.384	1.3420	1032	22.3	78	6.5	6.9									
21	493.477	1.3406	1020	22.7	80	6.5	7.0	11	123	55	613	4.0	45	90.7	1011	
22	429.430	0.9377	696	14.2	86	6.8	7.1									
23		0.3871	288	6.5	84	6.9	7.0									
24		0.0422	30	0.8	82	6.7	6.9									
25		0.4230	312	7.1	78	6.9	7.2									
26	440.446	1.2662	960	19.2	79	6.7	7.1									
27	468.553	1.1421	864	19.4	79	6.7	6.9	14.5	138	47.5	451	6.2	59	92.7	880	32.8
28	481.894	1.1117	816	16.6	82	6.7	6.9	5.5	51	43	398	5.2	48	93.7	866	
29	428.717	1.0257	780	15.4	86	6.7	7.0									
30		0.4807	360	8.9	86	6.9	7.2									
31		0.5156	408	9.1	82	7.0	7.2									
TOT	9275.699	32.0249	24078	510.3												
Max	507.384	1.5759	1200	25.3	90	7.2	7.5	19.7	232	176.0	2307	6.3	67	108.0	1376	39.8
AVG	463.785	1.0331	777	16.5	83			11.2	125	74.6	862	4.9	54	93.5	1038	

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company



P.O. Box 368
Pago Pago, Tutuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

June 15, 1992

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of April 1992 under the
U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of April 1992. StarKist Samoa met all effluent limitations except for the monthly average and daily maximum for total nitrogen.

The monthly average nitrogen loading limit of 1200 pounds was exceeded by 5 percent while the daily maximum limit of 2100 pounds was exceeded on one day (April 30th) by 8 percent.

As stated in StarKist Samoa's March report (dated April 28th) to the agencies, the plant experienced a series of mechanical problems with its fishmeal plant which resulted in higher than normal amount of fish scrap being put through the wastewater treatment plant.

This problem was being corrected throughout the months of March and April with normal operations resuming in early May. Staff will continue to monitor the operation closely to ensure that all the effluent limitations are met in the future.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true,

Page 2

accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/t1

Attachment

cc: Mr. Norman Lovelace - US EPA ✓
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Wastewater Summary Report for the Month of April 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits Lo Hi		Oil & Grease Eff mg/l Total #/day		TSS Eff mg/l Total #/day		TP Eff mg/l Total #/day		TN Eff mg/l Total #/day		Total Ammonia Eff mg/l
1	466.357	1.4981	1104	26.3	80	7.0	7.2	9.9	123	55.5	691	3.1	38	57.5	715	21.2
2	502.420	2.0594	1392	26.0	80	7.0	7.1									
3	501.025	1.5306	1176	22.3	78	7.1	7.2	12.6	160	93.0	1184	4.4	56	100.0	1273	
4	463.510	1.5554	1140	23.9	84	7.0	7.3									
5		0.1026	72	2.0	86	6.9	7.3									
6	462.277	1.3449	1080	19.2	86	7.2	7.3									
7	472.271	1.3984	1080	19.0	83	6.8	7.2	76.6	891	282.7	3288	22.4	280	180.0	2093	68.7
8	431.486	1.3790	1088	21.3	80	6.8	6.9									
9	457.709	1.4161	1080	22.7	80	6.7	7.1									
10	435.036	1.1491	816	16.2	86	6.9	7.2	42.1	402	265.3	2535	13.6	130	95.7	915	
11		0.3637	276	7.1	86	6.6	6.9									
12		0.7042	540	11.7	82	6.9	7.2									
13	431.001	1.5317	1182	22.3	80	7.2	7.3									
14	501.451	1.4852	1086	21.5	78	7.2	7.4	36.1	446	197.0	2433	11.0	136	88.1	1028	27.1
15	471.099	1.2578	960	20.3	80	7.0	7.3									
16	262.069	1.1526	864	21.9	80	6.9	7.2	42.3	405	210.5	2818	9.5	91	77.7	745	
17		0.4920	336	7.7	88	6.6	6.9									
18		0.5112	396	11.1	83	6.7	7.1									
19		0.9292	696	15.2	80	7.1	7.3									
20	441.980	1.3829	1104	21.3	78	7.2	7.4									
21	461.306	1.4658	1152	23.3	82	6.7	7.3	50.2	612	223.0	2718	16.4	200	136.0	1658	31.8
22	477.492	1.5933	1212	23.3	81	6.5	6.7									
23	495.688	1.4230	1140	22.3	80	6.6	6.9									
24	439.174	1.5456	1200	24.3	78	6.7	7.2	29.7	382	110.5	1420	14.0	180	108.0	1401	
25		0.4069	312	7.1	85	6.7	7.4					13.2	45	154.0	521	
26		0.6568	604	11.1	84	6.7	6.9					12.2	67	112.0	611	
27	468.263	1.4857	1140	23.3	79	6.5	6.9					13.3	164	117.0	1446	
28	480.156	1.3153	1056	19.8	81	6.6	7.0	40.2	440	153.3	1677	15.3	167	115.0	1258	33.9
29	493.118	1.4334	1140	21.3	80	6.6	7.1					19.3	230	150.0	1788	
30	473.654	1.5858	1200	24.3	80	6.5	6.9	64.1	845	179.3	2365	21.4	282	173.0	2281	
TOT	10108.330	36.1528	27444	559.1												
Max	502.420	2.0594	1392	26.3	88	7.2	7.4	76.6	891	282.7	3288	22.4	282	180.0	2281	68.7
AVE	469.470	1.2051	915	18.6	82			40.4	471	177.0	2083	13.5	146	118.6	1266	

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company



P.O. Box 368
Pago Pago, Tuvalu Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

Copy to Doug,
Mike

April 28, 1992

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of March 1992 under the
U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of March 1992. StarKist Samoa met all effluent limitations except for the monthly average for total nitrogen.

The plant experienced a series of mechanical problems with the fishmeal plant which resulted in higher than normal amount of fish scrap being put through the wastewater treatment plant.

This report summarizes the problems that apparently caused the high total nitrogen loadings and the rapid remedial actions taken by the plant to minimize such loadings.

1. There were mechanical problems with the shaker screen in the fish meal plant during the second week of March. This resulted in higher than normal amounts of solids going into the treatment plant. As a remedial measure, the shaker screen was completely rebuilt during that same week.
2. A new press for the fish meal plant arrived in March to replace one of two old presses. As the new structural work for this new press was being erected, one of the two old presses came apart completely and the plant was left with only one press to handle all the fish scrap in the fish meal plant. This resulted in higher than normal solids loadings to the treatment plant. As a remedial measure, the engineering staff worked around the clock and completed installation of the new press on April 13th.

The existing fishmeal plant at StarKist Samoa was designed and built over 9 years ago and requires periodic major repair. As a long term solution, corporate management at StarKist has already approved a \$3.9 million capital appropriation for a brand new and modern fishmeal plant to be operational by late 1993 or early 1994. Replacement of the new press at a cost of \$170,000 to StarKist Samoa was a first step in this program.

Although StarKist Samoa does not anticipate any major problems with the fishmeal plant with the new press in place, the staff will continue to monitor the operation closely to ensure that all the effluent limitations are met in the future.

StarKist Samoa respectfully requests that the U.S. Environmental Protection Agency and the American Samoa Government take into consideration the good faith efforts demonstrated by the cannery in completing the joint pipeline ahead of schedule as they review the March 1992 results.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

MWC:am

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Weigman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Attachments

Wastewater Summary Report for the Month of MARCH 1992

Date	Production Tons	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits		Oil & Grease		TSS		TP		TN		Tot Ammonia Eff mg/l
						Lo	Hi	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	
sun 1		0.9835	744	16.2	84	7.0	7.1									
2	465.802	1.3611	1032	21.9	80	6.9	7.0									
3	520.589	1.6719	1260	26.3	81	7.0	7.1	19.1	266	66.0	918	5.9	82	101.0	1404	40.5
4	507.385	1.5418	1140	21.9	80	6.8	6.9									
5	458.605	1.3834	1044	20.3	80	6.9	7.0									
6	507.997	1.4920	1128	23.3	79	7.0	7.2	19.8	246	32.0	397	4.0	50	110.0	1365	
sat 7	490.945	1.5006	1128	22.3	80	6.8	7.2									
sun 8		0.9602	768	16.2	83	7.0	7.2									
9	519.346	1.4768	1080	24.3	82	7.0	7.1									
10	521.451	1.4368	1104	23.9	82	6.9	7.1									
11	508.226	1.4794	1128	23.9	82	7.0	7.1	14.8	182	187.0	2301	11.7	144	161.0	1981	63.2
12	540.369	1.5886	1200	25.3	80	7.1	7.3									
13	523.846	1.5161	1224	26.3	81	7.0	7.2	22.7	286	33.5	422	6.1	77	163.0	2055	
14	495.860	1.4229	1104	24.7	83	7.0	7.1									
sun 15		0.9998	792	20.9	86	6.7	6.9									
16	501.635	1.4492	1092	23.3	78	7.0	7.1									
17	521.531	1.5219	1152	24.3	78	7.0	7.1	24.4	309	90.7	1148	6.1	77	142.0	1797	49.8
18	521.602	1.4935	1104	23.9	77	7.0	7.2									
19	487.913	1.7144	1296	25.3	79	6.7	7.1									
20	499.950	1.9608	1440	30.4	85	6.6	7.0	26.9	439	87.5	1427	3.0	49	106.0	1728	
21	450.663	1.6567	1260	23.9	82	6.7	7.0									
sun 22		0.8864	672	13.8	86	6.8	7.2									
23	481.456	1.3655	1020	19.8	78	6.7	7.0									
24	494.597	1.4338	1080	20.3	78	6.9	7.2	20.2	241	81.5	972	6.0	72	139.0	1657	46.0
25	494.887	1.5813	1140	21.3	79	7.1	7.3	13.5	178	62.0	815	3.6	48	120.0	1578	
26	525.438	1.7528	1260	22.3	80	7.0	7.4									
27	499.564	1.3182	996	19.2	82	7.0	7.2									
28		0.7691	552	12.0	86	6.7	6.9									
sun 29		0.4864	336	7.1	76	6.6	7.1									
30	504.344	1.5413	1128	23.3	80	6.7	7.1									
31	413.631	1.8960	1392	25.3	80	6.9	7.2									
TOT	12457.632	43.6422	32796	673.2					2145		8399		599		13566	
Max	540.369	1.9608			86				439		2301		144		2055	63.2
AVG	498.305	1.4078	1058	21.7	81			20.2	268	80.0	1050	5.8	75	130.3	1696	



APPROVED 1992 *[Signature]*

March 30, 1992

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of February 1992 under the
U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the following periods during the month of February 1992:

1. For the period February 1 through to February 13th, StarKist Samoa utilized the inner harbor outfall for its treated effluent and the interim effluent limitations as required under US EPA's Administrative Order issued on June 18, 1990 and modified on 30 October 1991 were applicable. All the analyses were performed by AECOS laboratory in Hawaii. Results are shown in attachment 1. StarKist Samoa, Inc. met all interim effluent limitations.
2. StarKist Samoa began utilizing the new joint cannery outfall on February 13th and the effluent limitations as specified in US EPA's Administrative Order amendment dated 11 February, 1992 became applicable. Results are shown in Attachment 2. StarKist Samoa met all effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the

Mr. Pati Faiai
March 30, 1992
Page 2

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information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT

February 1992

Total Phosphorus

Date Feb	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
4	421.586	1.2572	18.0	5.65	188	59
6	430.125	1.4555	17.8	5.33	213	65
11	452.405	1.5368	30.4	9.65	389	123
Average	434.705	1.4165	22.00	6.88	253	82
Maximum	452.405	1.5368	30.40	9.65	389	123

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	171
Daily Maximum	320
Daily Maximum (35% removal)	253

Total Nitrogen

Date Feb	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
4	421.586	1.2572	114.00	84.70	1192	886
6	430.125	1.4555	176.00	86.00	2130	1041
11	452.405	1.5368	168.00	125.00	2147	1598
Average	434.705	1.4165	152.67	98.67	1823	1175
Maximum	452.405	1.5368	176.00	125.00	2147	1598

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (3.76 x avg prod)	1634
Daily Maximum	2440
Daily Maximum (4.66 x max prod)	2108

Wastewater Summary Report for the Month of February 1992 Under the new A.O for the Joint Outfall

Date	Flow mgd	Alum #/day	Poly #/day	Max Temp F	pH Limits Lo HI		Oil & Grease		TSS		TP		TN		Tot Ammonia
							Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l	Total #/day	Eff mg/l
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13	1.1898	852	17.4	86	6.7	6.9	10.8	106	170.0	1682	5.3	52	112.0	1108	
14	1.1476	792	15.2	82	6.6	6.8									
15	0.6182	444	9.1	84	6.9	7.0									
16	0.2503	168	5.1	82	7.0	7.1									
17	0.3000	216	4.9	80	7.1	7.2									
18	1.4759	1032	18.6	76	7.0	7.1									
19	1.3891	960	18.2	78	6.9	7.0	17.2	199	74.0	855	4.7	55	97.7	1129	47.4
20	1.3737	972	18.6	76	6.8	7.0									
21	1.3573	948	18.2	78	6.9	7.0	10.9	123	69.5	784	8.3	94	128.0	1445	
22	1.1953	864	17.0	88	6.9	7.1									
23	0.8102	576	12.6	88	6.8	6.9									
24	1.3486	948	18.0	80	6.8	6.9									
25	1.3292	960	18.0	76	6.7	6.9	16.7	184	56.5	625	5.1	56	96.1	1062	45.5
26	1.3835	984	19.0	80	6.9	7.0									
27	1.4160	1032	19.2	80	7.0	7.1	11.1	131	56.0	659	4.7	56	97.3	1146	
28	1.5985	1080	19.8	79	7.0	7.2									
29	1.2246	900	17.4	80	6.8	7.0									
TOT	19.4076	13728	266.3					741		4605		312		5889	
Max	1.5985			88				199		1682		94		1445	47.4 ✓
Avg	1.1416	808	15.7	83			13.3	148	85.2	921	5.6	62	106.2	1178	✓

Date

13 Feb 92	O&G (mg/l)
Sub-sample 1	8.6
Sub-sample 2	7.3
Sub-sample 3	17.9
Sub-sample 4	8.6
Daily Average	10.6
19 Feb 92	O&G (mg/l)
Sub-sample 1	16.7
Sub-sample 2	14.4
Sub-sample 3	17.9
Sub-sample 4	19.8
Daily Average	17.2
21 Feb 92	O&G (mg/l)
Sub-sample 1	11.9
Sub-sample 2	12.3
Sub-sample 3	8.8
Sub-sample 4	10.5
Daily Average	10.9
25 Feb 92	O&G (mg/l)
Sub-sample 1	14.1
Sub-sample 2	11.9
Sub-sample 3	25.2
Sub-sample 4	15.4
Daily Average	16.7

Date

27 Feb 92	O&G (mg/l)
Sub-sample 1	12.9
Sub-sample 2	13.2
Sub-sample 3	11.2
Sub-sample 4	7.1
Daily Average	11.1

✓ EPA Rec'd
APR 09 1992 *alb*

*Copy to Mike,
Doug. L.*



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

March 27, 1992

Mr. Norman Lovelace
OPINAP (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
ASEPA
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Discharge Monitoring Report for the Months of December 1991
January 1992 and February 1992 under NPDES No. 0000019 as
issued to Starkist Samoa, Inc.

Please find attached StarKist Samoa's Discharge Monitoring Report covering the months of December 1991, January and February 1992. Monitoring results for the same period under US EPA's Administrative Order have been submitted to the agencies under separate covers.

The Stormwater (discharge 002) monitoring results for the months of December, January and February, 1992 are also included.

The final NPDES effluent limitations for Total Nitrogen and Total Phosphorus which came into effect on March 8, 1991 were exceeded during the months of December, January and February. The temperature limitations reflects the variance which was granted by the American Samoa Government to StarKist Samoa on June 7, 1991.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assured that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, to those persons directly responsible for the gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Mr. Norman Lovelace
Mr. Pati Faiai
March 26, 1992
Page 2

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

for Tawana F. Hings
MAURICE W. CALLAGHAN
General Manager

MC\ht:npdes\samoa

Attachments

cc: Ms. Sheila Wiegman
Mr. Ralph Ward
Mr. Norman Wei
Mr. William Adams

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "2/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "compos." as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-B ST	10-100 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 WC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		120-211 91 YEAR	122-212 12 MO	124-213 01 DAY	TO
		120-271 91 YEAR	122-272 12 MO	124-273 31 DAY	

PARAMETER		(3 card only) QUANTITY (120-271)					(4 card only) CONCENTRATION (120-271)					FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX			
pH	REPORTED	6.5	6.9	7.2	std. units	0								
	PERMIT CONDITION	6.5		8.6										continuous
Temperature	REPORTED	75	79	88	F	0								
	PERMIT CONDITION			90°							N/A			continuous
Total Suspended Solids	REPORTED	616	704	832	lbs./ Day	0		60.4						
	PERMIT CONDITION		3,300	8,300							mg./ L.			2/7days composite
Total Suspended Solids	REPORTED	0.72	0.83	0.91	lbs./ 1,000lbs seafood	0								
	PERMIT CONDITION		3.3	8.3							N/A			2/7days calculated
Oil and Grease	REPORTED	33	102	157	lbs./ Day	0		9.0						
	PERMIT CONDITION		840	2,100							mg./ L.			2/7days composite
Oil and Grease	REPORTED	0.04	0.12	0.20	lbs./ 1,000lbs seafood	0								
	PERMIT CONDITION		0.84	2.1							N/A			2/7days calculated
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER Maurice W. Callaghan		TITLE OF THE OFFICER General Manager	DATE 9 2 0 3 26 YEAR MO DAY	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief each information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE		

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 1545-0047

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-01 ST	16-10 AS-0000019 PERMIT NUMBER	17-10 001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		18-21 9 1 1 YEAR MO DAY	18-22 1 2 0 1 YEAR MO DAY	TO	

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.0500	0.6989	1.7468	MGD	0									
	PERMIT CONDITION		2.08												
Total Nitrogen	REPORTED				lbs./day			84.7		mg./L.	1				
	PERMIT CONDITION							0.20							
Total Phosphorus	REPORTED				lbs./day			3.7		mg./L.	1				
	PERMIT CONDITION							0.03							
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER Callaghan Maurice W.		TITLE OF THE OFFICER General Manager	DATE 9 2 03 2 6	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	
LAST	FIRST	MI	TITLE			YEAR

ORIGINAL

PAGE OF

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 150-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. average") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-B ST	14-16 AS-0000019 PERMIT NUMBER	17-19 002 DIS	20-21 2091 SIC	22-27 14° 16' 37" 170° 41' 12" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		28-31 9 1 1 20 1 YEAR MO DAY	TO	32-37 9 1 1 2 3 1 YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
TEMPERATURE	REPORTED	75.2	77	78.8	°F										
	PERMIT CONDITION													2/month	composite
TURBIDITY	REPORTED	10.35	24.8	39.3	NTU										
	PERMIT CONDITION													2/month	composite
OIL & GREASE	REPORTED	25.7	26.6	27.6	mg/l										
	PERMIT CONDITION													2/month	composite
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER Callaghan Maurice W.		TITLE OF THE OFFICER General Manager	DATE 9 20 3 2 6 YEAR MO DAY	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
---	--	---	-----------------------------------	--	--

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

DECEMBER 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
						LO	H	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	N.P.	1.0775	720.0	16.2	81	6.9	7.0																
2	414.313	1.5820	1075.2	24.3	79	6.9	7.1																
3	412.346	1.7468	1200.0	27.3	81	6.5	6.7	87.1	6.0	88	0.11	93.1%	425.0	50.0	726	0.88	88.2%	10.6	4.1	60	68.3	61.1	888
4	461.491	0.4570	307.2	8.1	76	6.6	6.7																
5	456.275	1.3703	921.6	20.7	84	6.5	6.8	80.0	2.9	33	0.04	96.4%	625.0	73.0	832	0.91	88.3%	13.1	3.3	38	104.0	96.5	1100
6	403.045	1.3049	902.4	20.3	82	7.0	7.2																
7	N.P.	0.5386	364.8	9.3	88	6.8																	
8	N.P.	0.1803	105.6	3.1	83	7.0																	
9	N.P.	0.3710	249.6	6.1	80	6.6	6.7																
10	N.P.	0.3501	240.0	5.7	76	6.7	6.8																
11	N.P.	0.2560	172.8	4.4	77	6.9																	
12	N.P.	0.1299	76.8	2.4	81	7.0																	
13	N.P.	0.1160	67.2	2.0	75	6.9																	
14	N.P.	0.1170	67.2	1.8	82	7.1																	
15	N.P.	0.5790	355.2	8.5	82	6.9	7.0																
16	402.290	1.1714	768.0	17.2	80	6.7	6.9																
17	400.534	1.2133	844.8	18.6	78	6.9	7.1	100.8	15.6	157	0.20	84.5%	577.0	63.5	641	0.80	89.0%	11.4	3.9	40	110.0	108.0	1090
18	430.546	1.3473	892.8	19.4	79	7.0	7.1	184.7	11.5	129	0.15	93.8%	735.0	55.0	616	0.72	92.5%	16.8	3.4	38	139.0	73.2	820
19	447.567	1.4042	921.6	20.3	82	6.8	6.9																
20	406.304	1.0977	729.6	16.2	81	6.7	6.9																
21	N.P.	0.5724	364.8	8.5	80	7.0																	
22	N.P.	0.1804	115.2	3.0	79	7.1																	
23	N.P.	0.1062	57.6	1.8	80	7.0																	
24	N.P.	0.0500	28.8	0.1	78	7.0																	
25	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
26	N.P.	0.1720	96.0	2.4	80	7.1																	
27	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
28	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
29	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
30	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
31	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
TOT.	4234.711	17.4713	11644.8	267.7						407	0.49				2815	3.31				175			3897
AVG	423.471	0.6989	465.8	10.7	80			113.2	9.0	102	0.12	91.9%	590.5	60.4	704	0.83	89.5%	13.0	3.7	44	105.3	84.7	974

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-90073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-2
ST

10-100
AS-0000019

PERMIT NUMBER

117-101
001

DHS

2091

SIC

14° 16' 37" 170° 41' 10"

LATITUDE LONGITUDE

REPORTING PERIOD: FROM

120-211 122-221 124-231
9 | 2 | 0 | 10 | 1
YEAR MO DAY

TO

126-271 128-281 130-291
9 | 2 | 0 | 1 | 31
YEAR MO DAY

102-371

100-401

100-701

PARAMETER		QUANTITY (3 card only) 120-401 122-411 124-421				UNITS	NO. EX	CONCENTRATION (4 card only) 126-431 128-441 130-451				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
pH	REPORTED	6.5	6.9	7.3	std. units	0									
	PERMIT CONDITION	6.5		8.6										continuous	
Temperature	REPORTED	74	80	86	F	0									
	PERMIT CONDITION			90°							N/A			continuous	
Total Suspended Solids	REPORTED	397	735	1334	lbs./Day	0		74.6							
	PERMIT CONDITION		3,300	8,300										2/7days composite	
Total Suspended Solids	REPORTED	0.60	0.90	1.55	1,000lbs/seafood	0									
	PERMIT CONDITION		3.3	8.3							N/A			2/7days calculated	
Oil and Grease	REPORTED	57	199	329	lbs./Day	0		19.8							
	PERMIT CONDITION		840	2,100										2/7days composite	
Oil and Grease	REPORTED	0.09	0.24	0.40	1,000lbs/seafood	0									
	PERMIT CONDITION		0.84	2.1							N/A			2/7days calculated	
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER <i>Maurice W. Callaghan</i>		TITLE OF THE OFFICER General Manager		DATE 9 2 0 32 6		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		

ORIGINAL

PAGE

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT".
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-01 ST	10-02 AS-0000019 PERMIT NUMBER	117-03 001 DIS	2091 MC	14° 16' 37" 170° 41' 10" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		9 2 01 0 1 YEAR MO DAY	TO	9 2 01 3 1 YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM						
Flow	REPORTED	0.2161	0.9852	1.6949	MGD	0										
	PERMIT CONDITION		2.08											N/A	continuous	
Total Nitrogen	REPORTED				lbs./day			88.5					1			
	PERMIT CONDITION							0.20						2/7days	composite	
Total Phosphorus	REPORTED				lbs./day			4.4					1			
	PERMIT CONDITION							0.03						2/7days	composite	
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Maurice W. McCallaghan		General Manager		9 2 01 3 1			
LAST	FIRST	MIDDLE	TITLE	YEAR	MO	DAY	

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 120-00673

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-5 ST	14-10 AS-0000019 PERMIT NUMBER	117-101 002 DIS	2091 SIC	14° 16' 37" 170° 41' 12" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		130-311 132-310 134-310 9 2 0 1 01 YEAR MO DAY	TO	130-371 130-391 130-391 9 20 1 3 1 YEAR MO DAY

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM				
TEMPERATURE	REPORTED	76.5	79.8	83.0	°F								2/month	composite
	PERMIT CONDITION													
TURBIDITY	REPORTED	8.5	16.0	23.4	NTU								2/month	composite
	PERMIT CONDITION													
OIL & GREASE	REPORTED	3.5	6.6	9.7	mg/l								2/month	composite
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER Callaghan Maurice W.		TITLE OF THE OFFICER General Manager	DATE 9 2 0 3 26 YEAR MO DAY	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE		

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

JANUARY 1992

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	N. P.	N. F.	0.0	0.0	N. F.	N. F.																	
2	N. P.	N. F.	0.0	0.0	N. F.	N. F.																	
3	N. P.	N. F.	0.0	0.0	N. F.	N. F.																	
4	N. P.	N. F.	0.0	0.0	N. F.	N. F.																	
5	N. P.	0.5342	360.0	8.1	78	6.9																	
6	360.624	1.5324	1080.0	23.3	86	6.8	7.0																
7	329.672	1.2917	900.0	20.3	86	6.5	6.7	99.7	5.3	57	0.09	94.7%	412.5	37.0	397	0.60	91.0%	19.1	4.6	50	110.0	86.0	924
8	388.375	1.2941	888.0	18.2	84	6.6	6.9																
9	409.313	1.4848	1020.0	20.3	79	6.5	6.9	100.6	6.9	85	0.10	93.1%	435.0	39.0	482	0.59	91.0%	16.3	6.7	82	96.8	90.7	1120
10	400.290	1.3355	960.0	19.2	84	7.0	7.3																
11	N. P.	0.2161	144.0	4.1	82	6.9	7.2																
12	N. P.	0.4858	324.0	7.1	82	6.6	6.9																
13	412.132	0.8095	552.0	12.2	82	6.8	7.1																
14	429.916	0.9614	660.0	14.2	80	6.9	7.3	838.9	21.2	169	0.20	97.5%	1030.0	166.8	1334	1.55	83.8%	15.1	5.0	40	119.0	104.0	831
15	408.837	1.4186	996.0	19.8	80	7.0	7.3																
16	444.167	1.1577	780.0	18.2	82	7.1	7.2	274.7	29.8	287	0.32	89.1%	1260.0	59.5	573	0.64	95.3%	19.5	5.1	49	154.0	113.0	1088
17	388.561	0.9015	636.0	14.8	80	6.9	7.2																
18	N. P.	0.3773	240.0	6.1	75	6.6	6.8																
19	N. P.	0.5486	360.0	8.5	79	7.0	7.2																
20	386.014	0.9257	660.0	13.2	80	6.5	6.9																
21	395.182	1.1150	816.0	16.2	81	6.6	6.8	467.3	32.9	305	0.39	93.0%	573.3	86.0	797	1.01	85.0%	14.6	3.4	32	122.0	87.6	812
22	380.802	0.5745	384.0	8.5	82	7.0	7.1																
23	425.406	0.9774	672.0	15.8	79	6.9	7.0	175.6	20.8	169	0.20	88.1%	520.0	56.5	459	0.54	89.1%	17.2	3.8	31	118.0	75.7	615
24	366.951	0.5848	384.0	9.1	82	6.8	6.9																
25	N. P.	0.5133	360.0	8.1	86	6.9	7.1																
26	N. P.	0.7891	540.0	11.3	81	6.6	6.7																
27	405.725	1.4921	984.0	20.3	82	6.7	6.8																
28	406.233	1.6949	1152.0	22.3	82	7.1	7.2	123.4	23.3	329	0.40	81.1%	320.0	62.5	881	1.08	80.5%	14.1	2.9	41	97.7	60.4	851
29	417.749	1.2273	840.0	17.2	82	7.0	7.3																
30	430.698	1.0748	780.0	15.2	84	7.2	7.3																
31	398.363	1.2824	852.0	17.4	86	6.9	7.0	155.3	18.1	193	0.24	88.3%	660.0	89.5	954	1.20	86.4%	20.5	4.1	44	128.0	90.5	965
TOT.	7985.010	26.6005	18324.0	389.0						1595	1.94				5877	7.22				368			7207
AVG	399.251	0.9852	678.7	14.4	63			279.4	19.8	199	0.24	90.6%	651.4	74.6	735	0.90	87.8%	17.1	4.4	46	118.2	88.5	901

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 155-RD073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

(12-15) ST	(16-18) AS-0000019 PERMIT NUMBER	(117-119) 001 DIS	2091 SIC	(14-16) 14° 16'37" LATITUDE	(17-19) 170° 41'10" LONGITUDE
REPORTING PERIOD: FROM		(120-121) 92 YEAR	(122-123) 02 MO	(124-125) 01 DAY	TO
		(120-121) 92 YEAR	(122-123) 02 MO	(124-125) 01 DAY	

PARAMETER		(3 card only)					(4 card only)					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX		
pH	REPORTED	6.6	7.0	7.2	std.	0							
	PERMIT CONDITION	6.5		8.6	units							continuous	
Temperature	REPORTED	73	79	88	F	0							
	PERMIT CONDITION			90°						N/A		continuous	
Total Suspended Solids	REPORTED	625	1165	1682	lbs./	0		103.4		mg./			
	PERMIT CONDITION		3,300	8,300	Day					L.		2/7days	composite
Total Suspended Solids	REPORTED	0.70	1.32	1.84	lbs./	0							
	PERMIT CONDITION		3.3	8.3	1,000lbs seafood					N/A		2/7days	calculated
Oil and Grease	REPORTED	105	285	626	lbs./	0		24.5		mg./			
	PERMIT CONDITION		840	2,100	Day					L.		2/7days	composite
Oil and Grease	REPORTED	0.11	0.32	0.69	lbs./	0							
	PERMIT CONDITION		0.84	2.1	1,000lbs seafood					N/A		2/7days	calculated
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER <i>Callaghan Maurice W</i>		TITLE OF THE OFFICER General Manager		DATE 9/2/93		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-R0071

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-9 ST	16-10 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		120-21 9 2 YEAR	122-22 0 2 MO	124-23 0 1 DAY	TO
		120-271 9 2 YEAR	120-291 0 2 MO	120-311 22 9 DAY	

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)			UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	MINIMUM			AVERAGE	MAXIMUM					
Flow	REPORTED	0.2503	1.1029	1.5985	MGD	0								
	PERMIT CONDITION		2.08											
Total Nitrogen	REPORTED				lbs./day			103.4		mg./L.	1	2/7days	composite	
	PERMIT CONDITION							0.20						
Total Phosphorus	REPORTED				lbs./day			6.1		mg./L.	1	2/7days	composite	
	PERMIT CONDITION							0.03						
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE	YEAR	MO	DAY		
Callaghan	Maurice W.	General Manager	92	03	216		

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the column labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

(12-5) ST	(14-10) AS-0000019 PERMIT NUMBER	(117-10) 002 DIS	2091 SIC	(14° 16' 37") LATITUDE	(170° 41' 12") LONGITUDE
REPORTING PERIOD: FROM		(120-21) (122-22) (124-23) 9 2 0 2 0 1 YEAR MO DAY	TO	(126-27) (128-28) (130-29) 9 2 0 2 2 9 YEAR MO DAY	

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		(13-41) MINIMUM	(13-42) AVERAGE	(13-43) MAXIMUM	(13-44) MAXIMUM			(13-45) MINIMUM	(13-46) AVERAGE	(13-47) MAXIMUM	(13-48) MAXIMUM				
TEMPERATURE	REPORTED	79	80.2	81.5	°F										
	PERMIT CONDITION													2/month	composite
TURBIDITY	REPORTED	7.48	17.2	26.9	NTU										
	PERMIT CONDITION													2/month	composite
OIL & GREASE	REPORTED	6.25	9.6	12.9	mg/l										
	PERMIT CONDITION													2/month	composite
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE		YEAR	MO		
Callaghan	Maurice W.	General Manager		9	2	03	2 6

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

FEBRUARY 1992

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS LO HI		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	0.000	0.2570	180.0	4.3	87	6.8	7.0																
2	0.000	0.8099	576.0	11.1	85	7.0	7.1																
3	427.976	1.3444	960.0	18.2	81	6.9	7.0																
4	421.586	1.2572	888.0	17.4	82	6.8	6.9	124.7	40.6	424	0.50	67.4%	336.7	136.2	1424	1.69	59.5%	18.0	5.7	59	114.0	84.7	886
5	431.441	1.3609	960.0	18.2	80	7.0	7.1																
6	430.125	1.4555	1080.0	21.1	81	6.9	7.0	361.1	40.2	487	0.57	88.9%	782.0	134.7	1630	1.90	82.8%	17.6	5.3	65	176.0	86.0	1041
7	386.830	1.2367	876.0	18.8	82	6.9	7.0																
8	0.000	0.4719	312.0	6.9	81	6.7	6.8																
9	0.000	0.4940	324.0	7.1	81	6.8	6.9																
10	420.958	1.1697	816.0	16.2	82	7.0	7.1																
11	452.405	1.5368	1140.0	21.1	79	7.0	7.2	466.6	49.0	626	0.69	89.5%	973.0	130.0	1661	1.84	86.6%	30.4	9.7	123	168.0	125.0	1598
12	443.383	1.1811	840.0	17.2	80	6.8	6.9																
13	456.001	1.1896	852.0	17.4	86	6.7	6.9		10.6	105	0.11			170.0	1682	1.84			5.3	52		112.0	1108
14	393.333	1.1476	792.0	15.2	82	6.6	6.8																
15	0.000	0.6182	444.0	9.1	84	6.9	7.0																
16	0.000	0.2503	168.0	5.1	82	7.0	7.1																
17	0.000	0.3000	216.0	4.9	80	7.1	7.2																
18	433.385	1.4759	1032.0	18.6	76	7.0	7.1																
19	441.851	1.3891	960.0	18.2	78	6.9	7.0		17.2	199	0.22			74.0	855	0.97			4.7	54		97.7	1129
20	467.273	1.3737	972.0	18.6	76	6.8	7.0																
21	420.513	1.3573	948.0	18.2	78	6.9	7.0		10.9	123	0.15			69.5	784	0.93			8.3	94		128.0	1445
22	382.347	1.1953	864.0	17.0	88	6.9	7.1																
23	0.000	0.8102	576.0	12.6	88	6.8	6.9																
24	437.439	1.3486	948.0	18.0	80	6.8	6.9																
25	444.624	1.3292	960.0	18.0	76	6.7	6.9		16.7	185	0.21			56.5	625	0.70			5.1	56		96.1	1062
26	481.018	1.3835	984.0	19.0	80	6.9	7.0																
27	479.171	1.4160	1032.0	19.2	80	7.0	7.1		11.1	131	0.14			56.0	659	0.69			4.7	55		97.3	1146
28	460.170	1.5985	1080.0	19.8	79	7.0	7.2																
29	438.119	1.2246	900.0	17.4	80	6.8	7.0																
TOT.	9149.948	31.9827	22680.0	443.9						2279	2.59				9321	10.55				559			9415
AVG	435.712	1.1029	782.1	15.3	82			317.5	24.5	285	0.32	81.9%	697.2	103.4	1165	1.32	76.3%	22.0	6.1	70	152.7	103.4	1177

StarKist Samo Inc.

An Affiliate of StarKist Seafood Company



P.O. Box 989
Pago Pago, Tutuila Island
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

MAR 09 1992

Copy to Mike
Doney

March 4, 1992

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of January 1992 under the
U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of January 1992 as required under U.S. EPA's Administrative Order issued on June 18, 1990 and modified on 30 October 1991. All the analyses were performed by AECOS laboratory in Hawaii. StarKist Samoa, Inc. met all interim effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT

10/15/92

Total Phosphorus

Date	Prod	Flow	Influent	Effluent	Influent	Effluent
Day	lb/day	mgd	mg/l	mg/l	#/day	#/day
7	329.672	1.2917	19.1	4.62	205	60
9	409.313	1.4848	16.3	6.68	201	82
14	429.916	0.9614	15.1	5.00	121	40
16	444.167	1.1577	19.5	5.07	188	49
21	395.182	1.1150	14.6	3.41	135	32
23	425.406	0.9774	17.2	3.81	140	31
28	406.233	1.6949	14.1	2.93	199	41
30	398.363	1.2824	20.5	4.13	219	44
Average	404.282	1.2457	17.05	4.46	176	46
Maximum	444.167	1.6949	20.56	6.68	219	82

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	114
Daily Maximum	320
Daily Maximum (35% removal)	142

Total Nitrogen

Date	Prod	Flow	Influent	Effluent	Influent	Effluent
Day	lb/day	mgd	mg/l	mg/l	#/day	#/day
7	329.672	1.2917	110.00	86.00	1182	924
9	409.313	1.4848	96.80	90.70	1195	1120
14	429.916	0.9614	119.00	104.00	951	831
16	444.167	1.1577	154.00	113.00	1483	1088
21	395.182	1.1150	122.00	87.60	1131	812
23	425.406	0.9774	118.00	75.70	959	615
28	406.233	1.6949	97.70	60.40	1377	851
30	398.363	1.2824	128.00	90.50	1365	965
Average	404.282	1.2457	113.18	86.49	1205	904
Maximum	444.167	1.6949	154.00	113.00	1483	1120

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (3.76 x avg prod)	1522
Daily Maximum	2440
Daily Maximum (4.66 x max prod)	2070

23 DEC 1991

Post



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

December 19, 1991

(684) 644-4231

FAX NO: (684) 644-2440

Mr. Norman Lovelace
OPINAP (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
ASEPA
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Discharge Monitoring Report for the Months of September, October and November 1991 under NPDES No. 0000019 as issued to StarKist Samoa, Inc.

Please find attached StarKist Samoa's Discharge Monitoring Report covering the months of September, October and November 1991. Monitoring results for the same period under US EPA's Administrative Order issued on June 18, 1990 have been submitted to the agencies under separate covers.

The stormwater (discharge 002) monitoring results for the months of September, October and November, 1991 are also included.

The final NPDES effluent limitations for Total Nitrogen and Total Phosphorus which came into effect on March 8, 1991 were exceeded during the months of September, October and November. The temperature limitation reflects the variance which was granted by the American Samoa Government to StarKist Samoa on June 7, 1991.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, to those persons directly responsible for the gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Mr. Norman Lovelace
Mr. Pati Faiai
September 25, 1991
Page 2

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

for *Tavayin F. Hing*
MAURICE W. CALLAGHAN
General Manager

MC/ht:npdes/samoa

Attachments

cc: Ms. Sheila Wiegman
Mr. Ralph Ward
Mr. Norman Wei
Mr. William Adams

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

(12-25) ST	(14-16) AS-0000019 PERMIT NUMBER	(17-19) DIS 001	(20-21) SIC 2091	(22-23) LATITUDE 14° 16' 37"	(24-25) LONGITUDE 170° 41' 10"
REPORTING PERIOD: FROM			TO		
(120-211) (122-221) (124-231) YEAR MO DAY 91 12 01			(126-271) (128-281) (130-291) YEAR MO DAY 91 09 30		

PARAMETER		(3 card only) QUANTITY (136-48) (146-53) (156-58)				UNITS	NO. EX	(4 card only) CONCENTRATION (158-59) (168-64) (178-69)				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	MINIMUM			AVERAGE	MAXIMUM						
pH	REPORTED	6.5	6.9	7.3	std. units	0									
	PERMIT CONDITION	6.5		8.6											
Temperature	REPORTED	74	81	87	F	0								continuous	
	PERMIT CONDITION			90°											
Total Suspended Solids	REPORTED	416	571	882	lbs./Day	0						N/A		continuous	
	PERMIT CONDITION		3,300	8,300									mg./L.		
Total Suspended Solids	REPORTED	0.46	0.66	0.97	1,000lbs seafood	0								2/7days composite	
	PERMIT CONDITION		3.3	8.3											
Oil and Grease	REPORTED	68	143	251	lbs./Day	0						N/A		2/7days calculated	
	PERMIT CONDITION		840	2,100									mg./L.		
Oil and Grease	REPORTED	0.08	0.17	0.31	1,000lbs seafood	0								2/7days composite	
	PERMIT CONDITION		0.84	2.1											
	REPORTED											N/A		2/7days calculated	
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER <i>Callaghan</i> <i>Maurice W.</i>		TITLE OF THE OFFICER General Manager	DATE 91 12 20	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE	YEAR MO DAY		

ORIGINAL

PAGE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 120-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in bases containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-5
ST

16-10
AS-0000019

PERMIT NUMBER

117-10
001
DIS

2091
SIC

14° 16' 37" 170° 41' 10"
LATITUDE LONGITUDE

REPORTING PERIOD: FROM

120-21 122-20 124-20
9 1 0 1 9 0 1
YEAR MO DAY

TO

120-27 120-20 120-31
9 1 0 1 9 3 1 0
YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION			UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	MINIMUM			AVERAGE	MAXIMUM					
Flow	REPORTED	0.2048	1.0068	1.5467	MGD	0								
	PERMIT CONDITION		2.08											
Total Nitrogen	REPORTED				lbs./day			70.3		mg./L.	1	continuous		
	PERMIT CONDITION													
Total Phosphorus	REPORTED				lbs./day			0.20		mg./L.	1	2/7days composite		
	PERMIT CONDITION							4.7						
	REPORTED							0.03				2/7days composite		
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE	YEAR	MO	DAY		
Callaghan	Maurice	General Manager	9	1	12 2 0		

WASTEWATER SUMMARY REPORT FOR THE MONTH OF

SEPTEMBER 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	N.P.	0.2048	134.4	3.2	83	6.8	7.0																
2	N.P.	0.7129	480.0	10.9	81	6.7	6.9																
3	401.523	1.2527	844.8	18.2	80	6.6	6.8	151.5	12.5	130	0.16	91.8%	667.5	54.7	570	0.71	91.8%	14.4	8.4	87	102.0	84.4	879
4	430.010	1.1625	768.0	16.6	82	6.8	7.1																
5	448.485	1.5467	1036.8	22.7	84	6.9	7.1	110.4	12.8	164	0.18	88.4%	325.0	54.7	704	0.78	83.2%	13.3	8.4	107	88.5	62.0	797
6	402.227	1.3059	864.0	18.8	86	7.0	7.2																
7	N.P.	0.6215	364.8	8.1	82	7.1	7.3																
8	N.P.	0.7540	480.0	10.9	82	6.8	7.0																
9	420.679	1.4310	960.0	21.5	85	6.7	6.8																
10	430.080	1.2639	854.4	19.0	84	6.7	6.9																
11	445.730	1.2721	864.0	18.8	84	6.6	6.8																
12	456.482	1.3198	873.6	19.2	85	6.7	6.8	200.3	7.5	83	0.09	96.2%	817.5	38.0	417	0.46	95.4%	18.8	5.0	55	105.0	84.8	931
13	407.166	1.2483	854.4	18.2	87	6.9	7.0	203.8	24.2	251	0.31	88.1%	505.0	50.5	524	0.64	90.0%	21.2	4.5	47	99.8	75.6	785
14	N.P.	0.7542	499.2	10.9	87	6.8	6.9																
15	N.P.	0.6349	384.0	9.1	83	6.7	6.9																
16	398.117	1.1451	777.6	17.0	82	6.6	6.8																
17	420.907	1.4692	979.2	21.3	81	6.5	6.7	341.0	15.2	186	0.22	95.5%	455.0	44.5	544	0.65	90.2%	18.5	1.7	21	98.3	58.1	710
18	430.975	1.2786	844.8	19.2	79	6.8	7.1																
19	441.542	1.0754	748.8	16.2	79	7.0	7.3	189.7	7.6	68	0.08	96.0%	627.5	46.5	416	0.47	92.6%	20.0	3.5	31	118.0	82.4	737
20	410.644	0.9427	633.6	14.2	78	7.0	7.1																
21	N.P.	0.5322	355.2	8.1	80	7.1	7.2																
22	N.P.	0.6669	451.2	10.0	82	6.8	7.0																
23	409.377	1.1573	796.3	16.2	81	6.5	6.8																
24	417.423	1.2269	825.6	17.8	80	6.6	7.0	358.9	9.0	92	0.11	97.5%	1255.0	50.0	510	0.61	96.0%	25.1	3.0	31	137.0	71.9	734
25	435.862	1.2085	806.4	17.6	82	6.9	7.0																
26	453.798	1.2823	844.8	18.2	84	6.8	6.9	290.1	16.2	173	0.19	94.4%	795.0	82.7	882	0.97	89.6%	19.6	3.1	33	104.0	43.1	460
27	409.283	1.1402	777.6	16.8	83	6.9	7.2																
28	N.P.	0.2334	153.6	3.8	86	7.0	7.1																
29	N.P.	0.2369	144.0	3.6	84	6.7	6.8																
30	414.530	1.1220	758.4	16.4	83	6.9	6.8																
TOT.	8484.840	30.2028	20159.5	442.5						1146	1.34				4566	5.29				413			6032
AVG	424.242	1.0068	672.0	14.8	83			230.7	13.1	143	0.17	93.5%	680.9	52.7	571	0.66	91.1%	18.9	4.7	52	106.6	70.3	754

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-00073

Stormwater Monitoring

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

REPORTING PERIOD: FROM

(117-10) DIS	(117-10) SIC
002	2091

(14-15) PERMIT NUMBER
AS-0000019

(130-21) YEAR	(132-23) MO	(134-25) DAY
91	09	30

TO

(130-21) YEAR	(132-23) MO	(134-25) DAY
91	09	30

PARAMETER		(3 card only)				UNITS	(4 card only)				UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		QUANTITY			NO. EX		CONCENTRATION						
		MINIMUM	AVERAGE	MAXIMUM			MINIMUM	AVERAGE	MAXIMUM				
TEMPERATURE	REPORTED	79	81.5	84	°F								
	PERMIT CONDITION												
TURBIDITY	REPORTED	15	17.8	20.6	NTU							2/month	composite
	PERMIT CONDITION												
OIL & GREASE	REPORTED	5.0	11.1	17.1	mg/l							2/month	composite
	PERMIT CONDITION												
	REPORTED											2/month	composite
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE	
LAST	FIRST	TITLE		YEAR	MO DAY
Callaghan	Maurice	General Manager		91	12 20

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
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AS-0000019

PERMIT NUMBER

001

DIS

2091

SIC

14° 16' 37"

LATITUDE

170° 41' 10"

LONGITUDE

REPORTING PERIOD: FROM

9 | 1 | 1 | 0 | 0 | 1
YEAR MO DAY

TO

9 | 1 | 1 | 0 | 3 | 1
YEAR MO DAY

PARAMETER		(3 card only)					(4 card only)					FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		QUANTITY			UNITS	NO. EX	CONCENTRATION			UNITS	NO. EX			
		(136-48) MINIMUM	(140-82) AVERAGE	(184-81) MAXIMUM					(136-48) MINIMUM			(140-82) AVERAGE	(184-81) MAXIMUM	
pH	REPORTED	6.6	6.9	7.2	std. units	0								
	PERMIT CONDITION	6.5		8.6										
Temperature	REPORTED	74	80	89	F	0							continuous	
	PERMIT CONDITION			90°										
Total Suspended Solids	REPORTED	325	603	769	lbs./Day	0				mg./L.			2/7days	composite
	PERMIT CONDITION		3,300	8,300										
Total Suspended Solids	REPORTED	0.38	0.71	0.89	1,000lbs/seafood	0				N/A			2/7days	calculated
	PERMIT CONDITION		3.3	8.3										
Oil and Grease	REPORTED	41	144	371	lbs./Day	0				mg./L.			2/7days	composite
	PERMIT CONDITION		840	2,100										
Oil and Grease	REPORTED	0.04	0.17	0.45	1,000lbs/seafood	0				N/A			2/7days	calculated
	PERMIT CONDITION		0.84	2.1										
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief each information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice W.		General Manager	91	11	210	

ORIGINAL

PAGE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "2/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-5 ST	15-10 AS-0000019 PERMIT NUMBER	117-10 001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		120-211 122-22 124-23 9 1 1 0 0 1 YEAR MO DAY	TO	120-271 122-281 124-291 9 1 1 0 3 1 YEAR MO DAY	

PARAMETER		QUANTITY					NO. EX	CONCENTRATION					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS			MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow	REPORTED	0.3376	1.1510	1.7885	MGD	0								
	PERMIT CONDITION		2.08											
Total Nitrogen	REPORTED				lbs./day			79.6				1		
	PERMIT CONDITION													
Total Phosphorus	REPORTED				lbs./day			3.8				1		
	PERMIT CONDITION													
	REPORTED							0.03						
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice		General Manager	9	1	2	

WASTEWATER SUMMARY REPORT FOR THE MONTH OF OCTOBER 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS LO HI		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	411.439	1.4860	988.8	21.3	81	6.6	6.8	141.3	30.0	371	0.45	78.8%	562.5	45.0	556	0.68	92.0%	20.6	2.5	31	112.0	67.3	832
2	438.421	1.5751	1017.6	22.3	82	6.7	6.8																
3	436.683	1.6815	1113.6	24.1	82	6.7	6.8	206.5	11.1	155	0.18	94.6%	580.0	54.0	755	0.86	90.7%	9.8	4.1	57	63.3	54.2	758
4	431.581	1.5718	1056.0	22.9	86	6.8	6.9																
5	N.P.	1.1873	787.2	17.2	89	6.8	7.1																
6	N.P.	0.9469	652.8	14.2	82	6.7	6.8																
7	416.634	1.7885	1200.0	26.0	85	6.6	6.8																
8	417.600	1.2656	854.4	18.6	81	6.8	6.9	77.7	25.6	270	0.32	67.0%	450.0	49.5	521	0.62	89.0%	16.4	4.1	43	96.7	66.1	696
9	424.606	1.3645	912.0	20.3	82	6.8	7.0																
10	466.788	1.3813	931.2	20.3	79	6.6	6.8	49.0	3.6	41	0.04	92.7%	305.0	53.5	615	0.66	82.5%	17.8	3.4	39	100.0	75.9	872
11	391.041	1.0083	672.0	15.9	84	6.6	6.9																
12	N.P.	0.4149	268.8	6.5	82	6.8	6.9																
13	N.P.	0.3690	249.6	6.1	78	6.9	7.0																
14	N.P.	0.7463	499.2	11.1	83	6.9	7.1																
15	413.274	1.4842	1008.0	22.3	81	6.7	6.8	114.7	8.5	105	0.13	92.6%	264.6	58.5	722	0.87	77.9%	24.2	6.8	83	161.0	160.0	1975
16	435.104	1.0075	681.6	15.0	81	6.8	6.9																
17	434.474	1.4639	998.4	21.9	78	6.7	6.8	135.9	5.9	71	0.08	95.7%	335.0	53.3	649	0.75	84.1%	19.4	4.1	49	113.0	86.0	1047
18	394.185	1.0003	662.4	14.6	82	6.6	6.8																
19	N.P.	0.3376	220.8	5.3	86	6.6	6.7																
20	N.P.	0.5825	384.0	8.9	81	6.9	7.1																
21	398.720	1.1070	739.2	16.2	82	7.0	7.2																
22	407.564	1.0252	691.2	16.8	78	6.9	7.2	226.0	7.7	65	0.08	96.6%	552.5	78.0	665	0.82	85.9%	24.5	3.6	31	151.0	94.8	808
23	420.450	1.2592	864.0	18.6	79	6.8	6.9																
24	424.145	1.2410	864.0	18.8	83	6.7	6.8	324.0	13.1	135	0.16	96.0%	860.0	31.5	325	0.38	96.3%	20.2	3.1	32	127.0	77.6	801
25	411.583	1.3137	902.4	19.8	82	6.9	7.2																
26	N.P.	0.5653	384.0	8.9	79	6.6	6.8																
27	N.P.	0.7627	508.8	11.7	82	7.0	7.2																
28	399.207	1.3162	892.8	20.3	87	6.8	6.9																
29	400.377	1.4991	1008.0	22.3	80	6.7	6.8	71.5	8.6	107	0.13	88.0%	237.5	36.0	449	0.56	84.8%	14.6	2.2	28	76.8	50.7	632
30	422.433	1.4718	998.4	23.3	80	6.8	7.0																
31	430.343	1.4570	1008.0	23.9	81	6.8	6.9	111.1	9.9	119	0.14	91.1%	295.0	63.5	769	0.89	78.5%	17.9	4.1	50	106.0	62.9	762
TOT.	9226.652	35.6812	24019.2	535.4						1441	1.72				6026	7.10				443			9182
AVG	419.393	1.1510	774.8	17.3	82			145.8	12.4	144	0.17	89.3%	444.2	52.3	603	0.71	86.2%	18.5	3.8	44	110.7	79.6	918

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-00073

Stormwater Monitoring

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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5. Specify sample type ("gmb" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-5 ST	14-10 AS-0000019 PERMIT NUMBER	117-10 002 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 12" LONGITUDE
REPORTING PERIOD: FROM		120-21 9 1	122-25 1 0	124-29 0 1	TO
		YEAR	MO	DAY	
		126-27 9 1	128-29 1 0	130-31 3 1	
		YEAR	MO	DAY	

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM				
TEMPERATURE	REPORTED	79	81.8	84.5	°F									
	PERMIT CONDITION													
TURBIDITY	REPORTED	25.8	28.8	31.7	NTU									
	PERMIT CONDITION													
OIL & GREASE	REPORTED	27	37.5	48	mg/l									
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan Maurice W.		General Manager		9 1 20			
LAST	FIRST	TITLE	YEAR	MO	DAY		

ORIGINAL

PAGE OF

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-RD073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
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(12-24) ST	(14-16) AS-0000019 PERMIT NUMBER	(17-19) 001 DIS	2091 SIC	(20-21) 14° 16' 37" LATITUDE	(22-23) 170° 41' 10" LONGITUDE
---------------	--	-----------------------	-------------	------------------------------------	--------------------------------------

REPORTING PERIOD: FROM

(20-21) 9	(22-23) 1	(24-25) 1	(26-27) 0	(28-29) 1
YEAR	MO	DAY		

TO

(30-31) 9	(32-33) 1	(34-35) 1	(36-37) 3	(38-39) 0
YEAR	MO	DAY		

PARAMETER		(3 card only) QUANTITY				UNITS	NO. EX	(4 card only) CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
pH	REPORTED	6.5	6.9	7.5		std.	0								
	PERMIT CONDITION	6.5		8.6		units								continuous	
Temperature	REPORTED	74	79	84		F	0								
	PERMIT CONDITION			90°										N/A	continuous
Total Suspended Solids	REPORTED	364	532	782		lbs./	0								
	PERMIT CONDITION		3,300	8,300		Day								2/7days	composite
Total Suspended Solids	REPORTED	0.44	0.62	0.92		lbs./	0								
	PERMIT CONDITION		3.3	8.3		1,000lbs seafood								N/A	2/7days calculated
Oil and Grease	REPORTED	64	209	328		lbs./	0								
	PERMIT CONDITION		840	2,100		Day								2/7days	composite
Oil and Grease	REPORTED	0.08	0.24	0.39		lbs./	0								
	PERMIT CONDITION		0.84	2.1		1,000lbs seafood								N/A	2/7days calculated
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER

TITLE OF THE OFFICER

DATE

Callaghan Maurice W.
LAST FIRST MI

General Manager

9 1 12 2 0
YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MONITORING REPORT

Form Approved
OHS NO. 128-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-6 SY	10-10 AS-0000019 PERMIT NUMBER	117-10 001 DIS	2091 MC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		12-31 9/1	12-31 1/1	TO	
		YEAR 9/1	MO 1/1	DAY 3/0	

PARAMETER		(1) and only				UNITS	NO. EX	(2) and only				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	CONCENTRATION			MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.1266	1.1136	1.8085	MGD	0									
	PERMIT CONDITION		2.08												
Total Nitrogen	REPORTED				lbs./day			73							
	PERMIT CONDITION														
Total Phosphorus	REPORTED				lbs./day			0.20							
	PERMIT CONDITION														
	REPORTED							0.03							
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE		YEAR	MO		
Callaghan	Maurice W.	General Manager		9/1	1/2	20	

ORIGINAL

PAGE OF

WASTEWATER SUMMARY REPORT FOR THE MONTH OF

NOVEMBER 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
						LO	H	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	397.021	1.1429	768.0	17.4	84	6.8	6.9																
2	N.P.	0.1727	115.2	3.0	82	6.8	7.0																
3	N.P.	0.7762	518.4	12.2	83	6.8	6.9																
4	396.397	1.4195	988.8	22.0	82	6.6	7.0																
5	396.141	1.3892	940.8	21.0	82	6.9	7.1																
6	406.754	1.4864	998.4	22.0	81	6.9	7.0	67.5	5.6	64	0.08	91.8%	280.0	33.3	385	0.49	88.1%	21.1	4.1	47	89.0	54.1	625
7	418.802	1.3166	921.6	20.3	81	6.8	6.9	226.7	16.8	184	0.22	92.6%	567.5	56.0	613	0.73	90.1%	21.7	5.1	55	123.0	113.0	1237
8	368.018	1.3615	940.8	21.3	80	6.8	7.3																
9	N.P.	0.4664	326.4	8.0	83	7.0	7.5																
10	N.P.	0.7471	499.2	11.3	77	7.0	7.2																
11	422.945	1.4434	988.8	21.5	80	7.1	7.3																
12	417.757	1.3154	902.4	20.3	78	6.5	7.1	158.0	14.4	158	0.19	90.9%	387.5	33.3	364	0.44	91.4%	20.4	6.3	69	93.2	71.6	783
13	429.937	1.3262	883.2	20.7	80	6.5	7.2																
14	434.955	1.4515	1017.6	23.3	79	6.5	7.0	195.5	23.3	281	0.32	88.1%	872.5	56.5	682	0.78	93.5%	24.0	4.5	54	116.0	74.9	904
15	412.644	1.2710	854.4	21.3	79	6.5	7.0																
16	N.P.	0.4610	288.0	8.1	84	6.9	7.0																
17	N.P.	0.8203	528.0	13.2	82	6.9	7.1																
18	419.419	1.4729	998.4	22.3	82	6.5	6.8																
19	424.600	1.5891	1075.2	24.3	81	7.0	7.3	128.3	24.9	328	0.39	80.6%	347.5	41.0	542	0.64	88.2%	18.7	2.6	34	80.5	65.2	862
20	436.667	1.5087	1056.0	24.3	84	6.7	7.1																
21	448.389	1.4898	1008.0	23.3	80	6.5	7.0	159.7	21.5	266	0.30	86.6%	372.5	34.5	427	0.48	90.7%	19.5	4.6	57	106.0	86.1	1067
22	416.872	1.6359	1104.0	25.3	79	6.5	6.8																
23	N.P.	0.7089	480.0	12.0	83	6.6	6.7																
24	N.P.	0.7671	499.2	12.2	80	6.9	7.0																
25	427.256	1.4128	979.2	22.3	82	6.8	7.0																
26	426.493	1.8085	1296.0	30.4	82	6.7	7.0	152.8	16.0	240	0.28	89.6%	430.0	52.0	782	0.92	87.9%	15.0	2.8	42	94.2	59.7	898
27	434.422	1.4731	1008.0	22.7	83	6.8	7.0	333.2	12.3	151	0.17	96.3%	375.0	37.5	459	0.53	90.0%	12.9	2.3	28	73.8	59.3	726
28	N.P.	0.5308	345.6	8.5	84	6.8	7.0																
29	N.P.	0.5180	336.0	8.5	82	6.9	7.1																
30	N.P.	0.1266	76.8	2.4	80	6.8	7.0																
TOT.	7935.489	33.4095	22742.4	525.4																			
AVG	417.657	1.1137	758.1	17.5	81			177.7	16.8	1672	1.95		454.1	43.0	4255	5.00		19.2	4.0	387	97.0	73.0	7102
								209	0.24	89.5%					532	0.62	90.0%			48			888

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-R0073

Stormwater Monitoring

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-3 ST	14-10 AS-0000019 PERMIT NUMBER	117-10 002 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 12" LONGITUDE
REPORTING PERIOD: FROM		130-21 9	132-23 11	134-25 11	TO
		130-21 YEAR	132-23 MO	134-25 DAY	
		130-27 9	132-29 11	134-31 30	
		130-27 YEAR	132-29 MO	134-31 DAY	

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
TEMPERATURE	REPORTED	68	72.5	77	°F										
	PERMIT CONDITION														2/month
TURBIDITY	REPORTED	14.4	16	17.5	NTU										
	PERMIT CONDITION														2/month
OIL & GREASE	REPORTED	5.0	8.4	11.8	mg/l										
	PERMIT CONDITION														2/month
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan Maurice W.		General Manager		9/11/20			
LAST	FIRST	MI	TITLE	YEAR	MO		



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

December 16, 1991

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

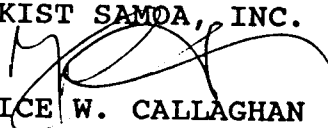
Re: Monitoring Results for the Month of November 1991 under the
U. S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of November 1991 as required under U.S. EPA's Administrative Order issued on June 18, 1990 and modified on 30 October 1991. All the analyses were performed by AECOS laboratory in Hawaii. StarKist Samoa, Inc. met all interim effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT

November 1991

Total Phosphorus

Date Nov	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
5	396.141	1.3892	21.1	4.05	244	47
7	418.802	1.3166	21.7	5.05	238	55
12	417.757	1.3154	20.4	6.32	223	69
14	434.955	1.4515	24.0	4.49	290	54
19	424.600	1.5891	18.7	2.61	247	34
21	448.389	1.4898	19.5	4.61	242	57
26	426.493	1.8085	15.0	2.79	226	42
27	434.422	1.4731	12.9	2.25	158	28
Average	425.195	1.4792	19.16	4.02	233	48
Maximum	448.389	1.8085	24.00	6.32	290	69

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	152
Daily Maximum	320
Daily Maximum (35% removal)	188

Total Nitrogen

Date Nov	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
5	396.141	1.3892	89.00	54.10	1028	625
7	418.802	1.3166	123.00	113.00	1347	1237
12	417.757	1.3154	93.20	71.60	1020	783
14	434.955	1.4515	116.00	74.90	1400	904
19	424.600	1.5891	80.50	65.20	1064	862
21	448.389	1.4898	106.00	86.10	1313	1067
26	426.493	1.8085	94.20	59.70	1417	898
27	434.422	1.4731	73.80	59.30	904	726
Average	425.195	1.4792	96.86	72.99	1167	888
Maximum	448.389	1.8085	123.00	113.00	1417	1237

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (3.76 x avg prod)	1599
Daily Maximum	2440
Daily Maximum (4.66 x max prod)	2089

NOV 1991 *John*

Copy to Mike



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

November 1, 1991

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of September 1991 under
the U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of September 1991 as required under US EPA's Administrative Order issued on June 18, 1990 and modified on 30 October 1991. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us yesterday.

StarKist Samoa, Inc. met all interim effluent limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General manager

Attachment

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Starkist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**September 1991****Total Phosphorus**

Date Sept	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	401.523	1.2527	14.4	8.39	150	87
5	448.485	1.5467	13.3	8.35	171	107
12	456.482	1.3198	18.8	5.03	206	55
13	407.166	1.2483	21.2	4.53	220	47
17	420.907	1.4692	18.5	1.73	226	21
19	441.542	1.0754	20.0	3.46	179	31
24	417.423	1.2269	25.1	3.04	256	31
26	453.798	1.2823	19.6	3.10	209	33
Average	430.916	1.3027	18.86	4.70	202	52
Maximum	456.482	1.5467	25.10	8.39	256	107

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	131
Daily Maximum	320
Daily Maximum (35% removal)	166

Total Nitrogen

Date Sept	Prod Tons	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	401.523	1.2527	102.00	84.40	1063	879
5	448.485	1.5467	88.50	62.00	1138	797
12	456.482	1.3198	105.00	84.80	1152	931
13	407.166	1.2483	99.80	75.60	1036	785
17	420.907	1.4692	98.30	58.10	1201	710
19	441.542	1.0754	118.00	82.40	1055	737
24	417.423	1.2269	137.00	71.90	1398	734
26	453.798	1.2823	104.00	43.10	1109	460
Average	430.916	1.3027	106.58	70.29	1144	754
Maximum	456.482	1.5467	137.00	84.80	1398	931

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (3.76 x avg prod)	1620
Daily Maximum	2440
Daily Maximum (4.66 x max prod)	2127



StarKist SAMOA, Inc.

18 OCT 1991 *Sam*

Copy to Mike



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

October 4, 1991

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of August 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of August 1991 as required under US EPA's Administrative Order issued on June 18, 1990 and modified on August 13, 1991. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us on October 2, 1991.

[The monthly average effluent limitation for total nitrogen based on 25 percent removal for the month of August 1991 was not met. It was exceeded by 20 pounds (out of 1,011 pounds).

The imposition of percent removal requirement on StarKist Samoa's effluent Total Nitrogen loading in US EPA's Administrative Order is a major concern to the plant.

Additional analyses of the plant influent for the month of August 1991 (Table 1) show that about 72 to 80 percent of the TN are in soluble form - a form that is not susceptible to chemical coagulation and precipitation treatment in a dissolved air flotation unit. This fact is further supported by the high soluble TN fraction in the treated effluent which ranged from 87 percent to almost 100 percent. Review of the August 1991 data in Table 1 also shows that the DAF cell was able to remove about 60 percent of the "particulate Total Nitrogen" loading-measured as the difference between the filtered and unfiltered loadings.

The high removal efficiencies achieved in total phosphorus and "particulate" nitrogen indicate that StarKist Samoa's treatment plant was operating properly.

The average daily Total Nitrogen loading to the receiving waters for August 1991 was 1,031 pounds - the lowest in five months and substantially below EPA's limit of 1,675 pounds per day.

Norman Wei of our Corporate Environmental staff discussed StarKist Samoa's concerns with Mr. Norman Lovelace and his staff on October 4th and requested that the Federal Agency rescind or modify the removal efficiency requirement for total nitrogen. Our request is based on the fact that StarKist Samoa was able to remove about 60 percent of the particulate form of nitrogen and that the overall loading to the Harbor was substantially below EPA's absolute limit.

We respectfully request your support and understanding on this matter.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

Attachments

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT**August 1991****Total Phosphorus**

Date August	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
Aug 1	1.5501	22.8	9.7	294	125
Aug 6	1.3128	16.9	5.7	185	62
Aug 8	1.1950	20.5	6.0	204	59
Aug 14	1.4700	13.6	4.5	166	55
Aug 16	1.2132	16.8	7.2	169	73
Aug 20	1.4589	18.8	4.9	228	59
Aug 22	1.3643	17.3	9.8	196	109
Aug 29	1.4072	16.1	4.5	188	52
Aug 30	1.0617	14.5	5.5	128	49
Average	1.3370	17.48	6.38	195	71
Maximum	1.5501	22.80	9.66	294	125

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	127
Daily Maximum	320
Daily Maximum (35% removal)	191

Total Nitrogen

Date August	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
Aug 1	1.5501	188.00	122.00	2423	1573
Aug 6	1.3128	111.00	94.00	1212	1026
Aug 8	1.1950	157.00	114.00	1560	1133
Aug 14	1.4700	91.30	98.90	1116	1209
Aug 16	1.2132	122.00	107.00	1231	1080
Aug 20	1.4589	125.00	87.60	1517	1063
Aug 22	1.3643	100.00	88.50	1135	1004
Aug 29	1.4072	102.00	47.30	1194	554
Aug 30	1.0617	84.70	72.30	748	638
Average	1.3370	120.11	92.40	1348	1081
Maximum	1.5501	188.00	122.00	2423	1573

Administrative Order Limitations for Total Nitrogen

Monthly Average	1675
Monthly Average (25% removal)	1011
Daily Maximum	2440
Daily Maximum (25% removal)	1818

StarKist Samoa, Inc.

Table 1: Analysis of Soluble Nitrogen in StarKist Samoa's wastewater (August 1991)

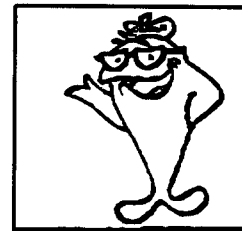
		Total Nitrogen				Soluble TN						Particulate TN		
Date	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day	Influent mg/l	Percent Soluble	Effluent mg/l	Percent Soluble	Influent #/day	Effluent #/day	Influent #/day	Effluent #/day	Percent Removal
Aug 1	1.5501	188.00	122.00	2423	1573	124.0	66%	110.0	90%	1598	1418	825	155	81.25%
Aug 6	1.3128	111.00	94.00	1212	1026	84.2	76%	80.3	85%	919	877	293	150	48.88%
Aug 8	1.1950	157.00	114.00	1560	1133	110	70%	94.1	83%	1093	935	467	198	57.66%
Aug 14	1.4700	91.30	98.90	1116	1209	64.8	71%	82.7	84%	792	1011	324	198	38.87%
Aug 16	1.2132	122.00	107.00	1231	1080	90.5	74%	91.1	85%	913	919	318	160	49.52%
Aug 20	1.4589	125.00	87.60	1517	1063	85.7	69%	66.9	76%	1040	812	477	251	47.33%
Aug 22	1.3643	100.00	88.50	1135	1004	79.8	80%	72.9	82%	905	827	229	177	22.77%
Aug 29	1.4072	102.00	47.30	1194	554	74.3	73%	48.7	* 100%	869	570	324	* 0	100.00%
Aug 30	1.0617	84.70	72.30	748	638	55.3	65%	68.4	95%	488	604	260	34	86.73%
Average	1.3370	120.11	92.40	1340	1031	85.40	72%	79.46	79%	958	886	301	147	59.22%
Maximum	1.6501	188.00	122.00	2423	1573	124.00	90%	110.00	95%	1598	1418	825	251	100.00%

Particulate TN = Total TN - Soluble TN

* rounded off

*Copy to Sheila,
Mike, Doug*

StarKist Seafood Company
Facsimile Transmittal



July

DATE: 13 January, 1992

TO: Pat Young

FROM: Norman Wei

FAX Number:

Number of pages including cover sheet: 2

Our Fax Number is (310) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (310) 590-3873**

=====

Special Messages:

Pat:

Here is copy of July 1991 results.

Norman

StarKist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**July 1991****Total Phosphorus**

Date July	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.3680	26.6	7.2	303	82
9	1.2475	23.0	6.2	239	65
11	1.4505	23.3	8.9	280	107
12	1.1117	19.4	6.4	179	59
16	1.5030	20.3	7.7	254	97
18	1.3422	17.3	4.1	193	46
24	1.5349	18.4	7.6	235	97
25	1.3169	22.2	9.8	243	107
30	1.4196	18.2	4.3	215	51
Average	1.3660	20.96	6.92	238	79
Maximum	1.5349	26.60	9.77	303	107

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	155
Daily Maximum	320
Daily Maximum (35% removal)	197

Total Nitrogen

Date July	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.3680	213.00	150.00	2423	1706
9	1.2475	156.00	98.10	1618	1018
11	1.4505	171.00	123.50	2063	1490
12	1.1117	133.00	116.00	1230	1072
16	1.5030	164.00	140.00	2050	1750
18	1.3422	104.00	80.10	1161	894
24	1.5349	134.00	103.00	1710	1315
25	1.3169	147.00	117.00	1610	1281
30	1.4196	110.00	80.00	1299	944
Average	1.3660	148.00	111.97	1685	1275
Maximum	1.5349	213.00	150.00	2423	1750

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1095
Daily Maximum	2745
Daily Maximum (35% removal)	1575

Copy to M Lee



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

August 8, 1991

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of June 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of June 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The last laboratory results for the month were transmitted to us on August 5th.

[All the daily and monthly effluent limitations for the month of June 1991 were met.]

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

ADMINISTRATIVE ORDER COMPLIANCE REPORT

June 1991

Total Phosphorus

Date June	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.2794	26.4	9.6	281	102
3	1.7081	20.4	10.5	290	149
7	1.0637	15.8	6.6	140	58
10	1.6705	17.5	6.8	243	95
14	1.1885	15.2	6.4	150	63
17	1.2595	16.8	5.4	176	56
21	1.4137	15.8	5.8	186	68
25	1.3336	30.4	10.2	337	113
28	1.5203	48.9	7.8	618	98
Average	1.3819	23.02	7.67	269	89
Maximum	1.7081	48.85	10.50	618	149

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	175
Daily Maximum	320
Daily Maximum (35% removal)	401

Total Nitrogen

Date June	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.2794	169.00	90.50	1798	963
3	1.7081	124.00	105.00	1761	1491
7	1.0637	96.70	77.20	855	683
10	1.6705	103.00	97.20	1431	1350
14	1.1885	86.70	78.40	857	775
17	1.2595	123.00	98.80	1288	1035
21	1.4137	107.00	87.30	1258	1026
25	1.3336	220.00	128.00	2440	1420
28	1.5203	386.00	157.00	4880	1985
Average	1.3819	157.27	102.16	1841	1192
Maximum	1.7081	386.00	157.00	4880	1985

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1197
Daily Maximum	2745
Daily Maximum (35% removal)	8172

16 OCT 1991 *Sm*

Orig to Mike



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231

FAX NO: (684) 644-2440

October 4, 1991

Mr. Norman Lovelace
OPINAP (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
ASEPA
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Discharge Monitoring Report for the Month of August 1991 under NPDES No. 0000019 as issued to StarKist Samoa, Inc.

Please find attached StarKist Samoa's Discharge Monitoring Report covering the month of August 1991. Monitoring results for the same period under US EPA's Administrative Order issued on June 18, 1990 and modified on August 13, 1991 are being submitted to the agencies under separate covers.

The stormwater (discharge 002) monitoring results for the month of August 1991 are also included.

The analyses for Total Nitrogen and Total Phosphorus were performed by Aecos Laboratory in Hawaii and the results were received on October 2.

The final NPDES effluent limitations for Total Nitrogen and Total Phosphorus which came into effect on March 8, 1991 were exceeded during the month of August. The temperature limitation reflects the variance which was granted by the American Samoa Government to StarKist Samoa on June 7, 1991.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the

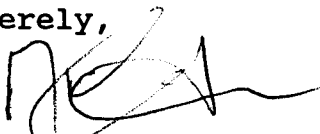
Mr. Norman Lovelace
Mr. Pati Faiai
October 4, 1991
Page 2

=====

information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for the gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,



MAURICE W. CALLAGHAN
General Manager

MC/ht:npdes/samoa

Attachments

cc: Ms. Sheila Wiegman
Mr. Ralph Ward
Mr. Norman Wei
Mr. William Adams

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain a copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

REPORTING PERIOD: FROM

(16-18) AS-0000019 PERMIT NUMBER		(117-181) 001 DIS	2091 SIC	(14-16) 16° 37' N LATITUDE	(17-19) 170° 41' 10" W LONGITUDE
(20-21) 91 YEAR	(22-23) 08 MO	(24-25) 01 DAY	(26-27) 91 YEAR		
			(28-29) 08 MO	(30-31) 31 DAY	

PARAMETER		(3 card only) QUANTITY (126-129)					NO. EX	(4 card only) CONCENTRATION (130-133)					NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM		AVERAGE	MAXIMUM	UNITS					
pH	REPORTED	6.5	7.0	7.5	std. units	0									
	PERMIT CONDITION	6.5		8.6										continuous	
Temperature	REPORTED	77	84	88	F	0									
	PERMIT CONDITION			90°								N/A		continuous	
Total Suspended Solids	REPORTED	364	750	968	lbs./Day	0									
	PERMIT CONDITION		3,300	8,300										2/7days	composite
Total Suspended Solids	REPORTED	0.46	0.85	1.09	1,000lb seafood	0									
	PERMIT CONDITION		3.3	8.3								N/A		2/7days	calculated
Oil and Grease	REPORTED	105	221	345	lbs./Day	0									
	PERMIT CONDITION		840	2,100										2/7days	composite
Oil and Grease	REPORTED	0.13	0.25	0.38	1,000lb seafood	0									
	PERMIT CONDITION		0.84	2.1								N/A		2/7days	calculated
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief each information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan	Maurice W.	General Manager	91	11	10		
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

ORIGINAL

PAGE

NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM
MONITORING REPORT

Form Approved
OMB NO. 158-0007

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-5 ST	10-10 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 SIC	14° 16' 37" 170° 41' 10" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		120-211 120-212 120-213 9 1 0 1 8 0 1 YEAR MO DAY	TO	120-271 120-281 120-291 9 1 0 1 8 3 1 YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.2100	1.0479	1.5501	MGD	0									
	PERMIT CONDITION		2.08												
Total Nitrogen	REPORTED				lbs./day			92.4							
	PERMIT CONDITION							0.20							
Total Phosphorus	REPORTED				lbs./day			6.4							
	PERMIT CONDITION							0.03							
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan Maurice W.	General Manager	9 1 1 0 0 4 YEAR MO DAY		

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

AUGUST 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS LO HI		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	469.037	1.5501	1036.8	23.3	84	7.0	7.2	553.3	19.4	250	0.27	96.5%	1092.5	67.0	864	0.92	93.9%	22.8	9.7	125	188.0	122.0	1573
2	413.532	1.3374	912.0	20.3	85	6.8	7.2																
3	N.P.	0.7522	528.0	11.7	84	6.5	6.7																
4	N.P.	0.6522	441.6	10.1	81	7.0	7.1																
5	423.406	1.2084	816.0	18.2	83	7.1	7.4																
6	422.008	1.3128	902.4	19.4	83	7.0	7.3	94.2	22.1	241	0.29	76.5%	1190.5	68.5	748	0.89	94.2%	16.9	5.7	62	111.0	94.0	1026
7	450.036	1.1259	768.0	17.0	84	6.8	7.0																
8	451.757	1.1950	796.8	17.4	80	6.7	6.9	231.1	16.8	167	0.19	92.7%	610.0	60.0	596	0.66	90.2%	20.5	6.0	59	157.0	114.0	1133
9	441.502	0.8032	547.2	12.2	81	6.8	7.0																
10	N.P.	0.2100	134.4	3.0	87	6.9	7.0																
11	N.P.	0.2117	144.0	3.4	82	7.0	7.2																
12	432.733	1.1713	787.2	17.2	84	7.1	7.4																
13	450.227	1.3207	883.2	19.2	81	6.8	7.1																
14	456.779	1.4700	950.4	20.7	82	6.5	6.8	211.1	28.2	345	0.38	86.6%	607.5	78.5	960	1.05	87.1%	13.6	4.5	55	91.3	98.9	1209
15	461.449	1.2053	806.4	19.2	81	6.5	6.8																
16	421.236	1.2132	816.0	18.2	83	6.8	7.2	134.1	11.8	119	0.14	91.2%	485.0	58.5	590	0.70	87.9%	16.8	7.2	73	122.0	107.0	1080
17	N.P.	0.4568	316.8	7.1	84	7.2	7.3																
18	N.P.	0.8941	595.2	13.2	81	7.2	7.4																
19	423.275	1.1000	768.0	16.8	82	7.0	7.3																
20	399.214	1.4589	960.0	21.0	83	7.2	7.5	742.2	17.0	206	0.26	97.7%	540.0	30.0	364	0.46	94.4%	18.8	4.9	59	125.0	87.6	1063
21	440.923	1.3580	864.0	18.8	84	6.9	7.2																
22	447.648	1.3643	892.8	19.8	86	6.8	7.0	236.8	27.9	316	0.35	88.2%	650.0	83.0	942	1.05	87.2%	17.3	9.6	109	100.0	88.5	1004
23	419.685	1.0576	729.6	15.8	85	6.6	6.8																
24	N.P.	0.2484	144.0	3.6	83	6.8	6.9																
25	N.P.	0.8217	576.0	12.6	84	7.0	7.2																
26	422.217	1.3393	883.2	19.0	84	6.9	7.1																
27	422.376	1.2799	844.8	18.2	81	6.6	6.9																
28	429.610	1.3144	864.0	18.6	81	6.5	6.7																
29	445.275	1.4072	912.0	19.8	82	6.6	6.9	454.3	20.5	240	0.27	95.5%	597.5	82.7	968	1.09	86.2%	16.1	4.5	52	102.0	47.3	554
30	412.313	1.0617	720.0	15.4	83	6.8	7.0	179.2	11.9	105	0.13	93.3%	783.8	81.0	715	0.87	89.7%	14.5	5.5	49	84.7	72.3	638
31	N.P.	0.5819	336.0	7.7	88	7.1	7.3																
TOT.	9556.238	32.4836	21676.8	477.9						1991	2.27				6746	7.68				642			9279
AVG	434.374	1.0479	699.3	15.4	83			315.1	19.5	221	0.25	90.9%	728.5	67.7	750	0.85	90.1%	17.5	6.4	71	120.1	92.4	1031

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-R0073

Stormwater Monitoring

INSTRUCTIONS

ST 14-16) AS-0000019 PERMIT NUMBER 17-19) 002 DIS 2091 SIC 14° 16' 37" LATITUDE 170° 41' 12" LONGITUDE

REPORTING PERIOD: FROM 120-21) 9 1 0 122-23) 8 0124-25) 0 1 TO 126-27) 9 128-29) 0830-31) 3 1

YEAR MO DAY YEAR MO DAY

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
TEMPERATURE	REPORTED	75	78.9	82.8	°F										
	PERMIT CONDITION														2/month
TURBIDITY	REPORTED	5.94	9.52	13.1	NTU										
	PERMIT CONDITION														2/month
OIL & GREASE	REPORTED	1.00	1.20	1.40	mg/l										
	PERMIT CONDITION														2/month
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER

Callaghan Maurice W.

LAST FIRST MI

TITLE OF THE OFFICER

General Manager

TITLE

DATE

9 1 1 00 14

YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

VASTE WATER SUMMARY REPORT FOR THE MONTH OF

AUGUST 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	469.037	1.5501	1036.8	23.3	84	7.0	7.2	553.3	19.4	250	0.27	96.5%	1092.5	67.0	864	0.92	93.9%	22.8	9.7	125	188.0	122.0	1573
2	413.532	1.3374	912.0	20.3	85	6.8	7.2																
3	N.P.	0.7522	528.0	11.7	84	6.5	6.7																
4	N.P.	0.6522	441.6	10.1	81	7.0	7.1																
5	423.406	1.2084	816.0	18.2	83	7.1	7.4																
6	422.008	1.3128	902.4	19.4	83	7.0	7.3	94.2	22.1	241	0.29	76.5%	1190.5	68.5	748	0.89	94.2%	16.9	5.7	62	111.0	94.0	1026
7	450.036	1.1259	768.0	17.0	84	6.8	7.0																
8	451.757	1.1950	796.8	17.4	80	6.7	6.9	231.1	16.8	167	0.19	92.7%	610.0	60.0	596	0.66	90.2%	20.5	6.0	59	157.0	114.0	1133
9	441.502	0.8032	547.2	12.2	81	6.8	7.0																
0	N.P.	0.2100	134.4	3.0	87	6.9	7.0																
1	N.P.	0.2117	144.0	3.4	82	7.0	7.2																
2	432.733	1.1713	787.2	17.2	84	7.1	7.4																
3	450.227	1.3207	883.2	19.2	81	6.8	7.1																
4	456.779	1.4700	950.4	20.7	82	6.5	6.8	211.1	28.2	345	0.38	86.6%	607.5	78.5	960	1.05	87.1%	13.6	4.5	55	91.3	98.9	1209
5	461.449	1.2053	806.4	19.2	81	6.5	6.8																
6	421.236	1.2132	816.0	18.2	83	6.8	7.2	134.1	11.8	119	0.14	91.2%	485.0	58.5	590	0.70	87.9%	16.8	7.2	73	122.0	107.0	1080
7	N.P.	0.4568	316.8	7.1	84	7.2	7.3																
8	N.P.	0.8941	595.2	13.2	81	7.2	7.4																
9	423.275	1.1000	768.0	16.8	82	7.0	7.3																
0	399.214	1.4589	960.0	21.0	83	7.2	7.5	742.2	17.0	206	0.26	97.7%	540.0	30.0	364	0.46	94.4%	18.8	4.9	59	125.0	87.6	1063
1	440.923	1.3580	864.0	18.8	84	6.9	7.2																
2	447.648	1.3643	892.8	19.8	86	6.8	7.0	236.8	27.9	316	0.35	88.2%	650.0	83.0	942	1.05	87.2%	17.3	9.6	109	100.0	88.5	1004
3	419.685	1.0576	729.6	15.8	85	6.6	6.8																
4	N.P.	0.2484	144.0	3.6	83	6.8	6.9																
5	N.P.	0.8217	576.0	12.6	84	7.0	7.2																
6	422.217	1.3393	883.2	19.0	84	6.9	7.1																
7	422.376	1.2799	844.8	18.2	81	6.6	6.9																
8	429.610	1.3144	864.0	18.6	81	6.5	6.7																
9	445.275	1.4072	912.0	19.8	82	6.6	6.9	454.3	20.5	240	0.27	95.5%	597.5	82.7	968	1.09	86.2%	16.1	4.5	52	102.0	47.3	554
0	412.313	1.0617	720.0	15.4	83	6.8	7.0	179.2	11.9	105	0.13	93.3%	783.8	81.0	715	0.87	89.7%	14.5	5.5	49	84.7	72.3	638
1	N.P.	0.5819	336.0	7.7	88	7.1	7.3																
T.	9556.238	32.4836	21676.8	477.9						1991	2.27				6746	7.68				642			9279
/G	434.374	1.0479	699.3	15.4	83			315.1	19.5	221	0.25	90.9%	728.5	67.7	750	0.85	90.1%	17.5	6.4	71	120.1	92.4	1031

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

AUGUST 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEM F	pH LIMITS LO H		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	469.037	1.5501	1036.8	23.3	84	7.0	7.2	553.3	19.4	250	0.27	96.5%	1092.5	67.0	864	0.92	93.9%	22.8	9.7	125	188.0	122.0	1573
2	413.532	1.3374	912.0	20.3	85	6.8	7.2																
3	N.P.	0.7522	528.0	11.7	84	6.5	6.7																
4	N.P.	0.6522	441.6	10.1	81	7.0	7.1																
5	423.406	1.2084	816.0	18.2	83	7.1	7.4																
6	422.008	1.3128	902.4	19.4	83	7.0	7.3	94.2	22.1	241	0.29	76.5%	1190.5	68.5	748	0.89	94.2%	16.9	5.7	62	111.0	94.0	1026
7	450.036	1.1259	768.0	17.0	84	6.8	7.0																
8	451.757	1.1950	796.8	17.4	80	6.7	6.9	231.1	16.8	167	0.19	92.7%	610.0	60.0	596	0.66	90.2%	20.5	6.0	59	157.0	114.0	1133
9	441.502	0.8032	547.2	12.2	81	6.8	7.0																
10	N.P.	0.2100	134.4	3.0	87	6.9	7.0																
11	N.P.	0.2117	144.0	3.4	82	7.0	7.2																
12	432.733	1.1713	787.2	17.2	84	7.1	7.4																
13	450.227	1.3207	883.2	19.2	81	6.8	7.1																
14	456.779	1.4700	950.4	20.7	82	6.5	6.8	211.1	28.2	345	0.38	86.6%	607.5	78.5	960	1.05	87.1%	13.6	4.5	55	91.3	98.9	1209
15	461.449	1.2053	806.4	19.2	81	6.5	6.8																
16	421.236	1.2132	816.0	18.2	83	6.8	7.2	134.1	11.8	119	0.14	91.2%	485.0	58.5	590	0.70	87.9%	16.8	7.2	73	122.0	107.0	1080
17	N.P.	0.4568	316.8	7.1	84	7.2	7.3																
18	N.P.	0.8941	595.2	13.2	81	7.2	7.4																
19	423.275	1.1000	768.0	16.8	82	7.0	7.3																
20	399.214	1.4589	960.0	21.0	83	7.2	7.5	742.2	17.0	206	0.26	97.7%	540.0	30.0	364	0.46	94.4%	18.8	4.9	59	125.0	87.6	1063
21	440.923	1.3580	864.0	18.8	84	6.9	7.2																
22	447.648	1.3643	892.8	19.8	86	6.8	7.0	236.8	27.9	316	0.35	88.2%	650.0	83.0	942	1.05	87.2%	17.3	9.6	109	100.0	88.5	1004
23	419.685	1.0576	729.6	15.8	85	6.6	6.8																
24	N.P.	0.2484	144.0	3.6	83	6.8	6.9																
25	N.P.	0.8217	576.0	12.6	84	7.0	7.2																
26	422.217	1.3393	883.2	19.0	84	6.9	7.1																
27	422.376	1.2799	844.8	18.2	81	6.6	6.9																
28	429.610	1.3144	864.0	18.6	81	6.5	6.7																
29	445.275	1.4072	912.0	19.8	82	6.6	6.9	454.3	20.5	240	0.27	95.5%	597.5	82.7	968	1.09	86.2%	16.1	4.5	52	102.0	47.3	554
30	412.313	1.0617	720.0	15.4	83	6.8	7.0	179.2	11.9	105	0.13	93.3%	783.8	81.0	715	0.87	89.7%	14.5	5.5	49	84.7	72.3	638
31	N.P.	0.5819	336.0	7.7	88	7.1	7.3																
TOT.	9556.238	32.4836	21676.8	477.9						1991	2.27				6746	7.68				642			9279
AVG	434.374	1.0479	699.3	15.4	83			315.1	19.5	221	0.25	90.9%	728.5	67.7	750	0.85	90.1%	17.5	6.4	71	120.1	92.4	1031

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

AUGUST 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS LO HI		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	469.037	1.5501	1036.8	23.3	84	7.0	7.2	553.3	19.4	250	0.27	96.5%	1092.5	67.0	864	0.92	93.9%	22.8	9.7	125	188.0	122.0	1573
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30	412.313	1.0617	720.0	15.4	83	6.8	7.0	179.2	11.9	105	0.13	93.3%	783.8	81.0	715	0.87	89.7%	14.5	5.5	49	84.7	72.3	638
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OT.	9556.238	32.4836	21676.8	477.9						1991	2.27				6746	7.68				642			9279
VG	434.374	1.0479	699.3	15.4	83			315.1	19.5	221	0.25	90.9%	728.5	67.7	750	0.85	90.1%	17.5	6.4	71	120.1	92.4	1031

1 OCT 1991

Cops to Pad.
Orig. to Mike



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231

FAX NO: (684) 644-2440

September 25, 1991

Mr. Norman Lovelace
OPINAP (E-4)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
ASEPA
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Discharge Monitoring Report for the Months of June and July 1991 under NPDES No. 0000019 as issued to StarKist Samoa, Inc.

Please find attached StarKist Samoa's Discharge Monitoring Report covering the months of June and July 1991. Monitoring results for the same period under US EPA's Administrative Order issued on June 18, 1990 have been submitted to the agencies under separate covers.

The stormwater (discharge 002) monitoring results for the months of June and July 1991 are also included.

The analyses for Total Nitrogen and Total Phosphorus were performed by Aecos Laboratory in Hawaii. The laboratory results for the month of August 1991 have not yet been received from the laboratory and they will be submitted to the agencies as soon as they are available.

June?
The final NPDES effluent limitations for Total Nitrogen and Total Phosphorus which came into effect on March 8, 1991 were exceeded during the months of June and July. The temperature limitation reflects the variance which was granted by the American Samoa Government to StarKist Samoa on June 7, 1991.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons

Mr. Norman Lovelace
Mr. Pati Faiai
September 25, 1991
Page 2

best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,



MAURICE W. CALLAGHAN
General Manager

MC/ht:npdes/samoa

Attachments

cc: Ms. Sheila Wiegman
Mr. Ralph Ward
Mr. Norman Wei
Mr. William Adams

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-9
ST

10-10
AS-0000019
PERMIT NUMBER

117-10
001
DIS

2091
SIC

14° 16'37" 170° 41'10"
LATITUDE LONGITUDE

REPORTING PERIOD: FROM

120-21 122-23 124-25
9 1 0 6 0 1
YEAR MO DAY

TO

126-27 128-29 130-31
9 1 06 3 0
YEAR MO DAY

PARAMETER		QUANTITY					CONCENTRATION					FREQUENCY OF ANALYSIS		SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX			
pH	REPORTED	6.7	7.1	7.6	std.	0								
	PERMIT CONDITION	6.5		8.6	units								continuous	
Temperature	REPORTED	78	82	87	F	0								
	PERMIT CONDITION			90°						N/A			continuous	
Total Suspended Solids	REPORTED	456	776	1200	lbs./Day	0				mg./L.				
	PERMIT CONDITION		3,300	8,300									2/7days composite	
Total Suspended Solids	REPORTED	0.53	0.89	1.38	lbs./1,000lbs seafood	0								
	PERMIT CONDITION		3.3	8.3						N/A			2/7days calculated	
Oil and Grease	REPORTED	92	314	906	lbs./Day	0				mg./L.				
	PERMIT CONDITION		840	2,100									2/7days composite	
Oil and Grease	REPORTED	0.11	0.36	1.05	lbs./1,000lbs seafood	0								
	PERMIT CONDITION		0.84	2.1						N/A			2/7days calculated	
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER			DATE			I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan Maurice W.			General Manager			9 1 0 9 2 6				
LAST	FIRST	MI	TITLE			YEAR	MO	DAY		

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-0067

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-6 BY	10-10 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 SIC	14° 16' 37" 170° 41' 10" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		120-211 120-220 120-230 9/1 0/6 0/1 YEAR MO DAY	TO	120-271 120-280 120-291 9/1 0/6 3/0 YEAR MO DAY

PARAMETER		(1) said only					(2) said only					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX		
Flow	REPORTED	0.3629	1.2250	1.7081	MGD	0							
	PERMIT CONDITION		2.08								N/A		continuous
Total Nitrogen	REPORTED				lbs./day		102.2				1		
	PERMIT CONDITION						0.20					2/7days	composite
Total Phosphorus	REPORTED				lbs./day		7.7				1		
	PERMIT CONDITION						0.03					2/7days	composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	TITLE		YEAR	MO		
Callaghan	Maurice W.	General Manager		9	1	06	26

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 150-00073

STORMWATER MONITORING

INSTRUCTIONS

10-5
ST

10-10
AS-0000019
PERMIT NUMBER

117-10
002
DIS

2091
SIC

14° 16' 37" 170° 41' 32"
LATITUDE LONGITUDE

120-21 122-23 124-25
9 11 06 11
YEAR MO DAY

120-27 120-29 120-31
9 11 016 30
YEAR MO DAY

REPORTING PERIOD FROM TO

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM						
TEMPERATURE	REPORTED	81.2	81.5	81.8		°F										
	PERMIT CONDITION														2/month	composite
TURBIDITY	REPORTED	9.5	17.5	25.5		NTU										
	PERMIT CONDITION														2/month	composite
OIL & GREASE	REPORTED	12.7	28.8	44.9		mg/l										
	PERMIT CONDITION														2/month	composite
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice	W.	General Manager	9	11	06 2 16	

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-0001

INSTRUCTIONS

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5. Specify sample type ("grab" or "____ hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-01 ST	16-01 AS-0000019 PERMIT NUMBER	17-01 001 DIS	18-01 2091 MC	19-01 14° 16' 37" LATITUDE	20-01 170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		21-01 9 11 YEAR	22-01 01 7 MO	23-01 01 DAY	TO
		24-01 9 10 17 YEAR	25-01 3 11 MO	26-01 3 11 DAY	

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM						
Flow	REPORTED	0.2996	1.0974	1.6003		MGD	0									
	PERMIT CONDITION		2.08										N/A		continuous	
Total Nitrogen	REPORTED					lbs./day			112				1			
	PERMIT CONDITION								0.20						2/7days	composite
Total Phosphorus	REPORTED					lbs./day			6.9				1			
	PERMIT CONDITION								0.03						2/7days	composite
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice	W.	General Manager	9 11	01	16	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 1525-0047

STORMWATER MONITORING

INSTRUCTIONS

10-10
117-10
120-21 122-22 124-23
126-27 128-28 130-29

ST
AS-0000019
PERMIT NUMBER

002
DHS

2091
SIC

14° 16' 37" 170° 41' 12"
LATITUDE LONGITUDE

REPORTING PERIOD FROM 9 1 07 0 1 TO 9 1 07 31
YEAR MO DAY YEAR MO DAY

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/hr. days (e.g., "2/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail. Original to office specified in permit.

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
TEMPERATURE	REPORTED	71.5	72.9	74.3	°F									2/month	composite
	PERMIT CONDITION														
TURBIDITY	REPORTED	13.1	38.55	64	NTU									2/month	composite
	PERMIT CONDITION														
OIL & GREASE	REPORTED	11.7	53.3	41.6	mg/l									2/month	composite
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER: Callaghan Maurice W. TITLE OF THE OFFICER: General Manager DATE: 9 11 07 25

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-RD073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

ST

14-101
AS-0000019
PERMIT NUMBER

117-101
001
DIS

2091
SIC

14° 16' 37" 170° 41' 10"
LATITUDE LONGITUDE

120-211 122-231 124-251
91 07 01
YEAR MO DAY

126-271 128-291 130-311
91 07 31
YEAR MO DAY

REPORTING PERIOD: FROM TO

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM						
pH	REPORTED	6.5	7.1	7.7	std. units	0										
	PERMIT CONDITION	6.5		8.6											continuous	
Temperature	REPORTED	78	81	86	F	0										
	PERMIT CONDITION			90°								N/A			continuous	
Total Suspended Solids	REPORTED	488	706	1350	lbs./ Day	0										
	PERMIT CONDITION		3,300	8,300								mg./ L.			2/7days	composite
Total Suspended Solids	REPORTED	0.55	0.78	1.46	1,000lbs seafood	0										
	PERMIT CONDITION		3.3	8.3								N/A			2/7days	calculated
Oil and Grease	REPORTED	55	198	493	lbs./ Day	0										
	PERMIT CONDITION		840	2,100								mg./ L.			2/7days	composite
Oil and Grease	REPORTED	0.06	0.22	0.52	1,000lbs seafood	0										
	PERMIT CONDITION		0.84	2.1								N/A			2/7days	calculated
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															

NAME OF PRINCIPAL EXECUTIVE OFFICER
Callaghan Maurice W.

LAST FIRST MI

TITLE OF THE OFFICER
General Manager

TITLE

DATE
91 09 21

YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

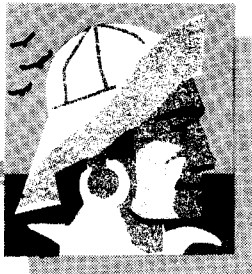
JUNE 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	PH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	428.984	1.2794	672.0	14.6	86	7.0	7.4	325.9	23.5	250	0.29	92.8%	830.0	58.5	622	0.73	93.0%	26.4	9.6	102	169.0	90.5	963
2	N.P.	0.9466	508.8	11.3	87	7.0	7.4																
3	435.794	1.7081	1008.0	21.3	85	6.9	7.2	87.1	20.7	294	0.34	76.2%	372.5	84.5	1200	1.38	77.3%	20.4	10.5	149	124.0	105.0	1491
4	464.282	1.6064	988.8	22.3	85	6.9	7.5																
5	476.372	1.4118	921.6	20.3	84	7.0	7.3																
6	478.195	1.4084	940.8	21.3	83	7.0	7.1																
7	435.784	1.0637	720.0	16.6	83	7.0	7.2	131.7	14.4	127	0.15	89.1%	316.7	57.0	504	0.58	82.0%	15.8	6.6	58	96.7	77.2	683
8	N.P.	0.3629	220.8	5.3	84	7.0	7.1																
9	N.P.	0.7057	451.2	10.1	86	7.0	7.1																
10	430.279	1.6705	1008.0	22.3	81	6.9	7.1	237.5	65.2	906	1.05	72.5%	565.0	78.0	1084	1.26	86.2%	17.5	6.8	95	103.0	97.2	1350
11	466.380	1.4057	864.0	20.3	84	7.0	7.2																
12	474.489	1.5157	921.6	21.3	83	7.1	7.3																
13	476.321	1.2175	768.0	17.4	84	7.0	7.2																
14	456.794	1.1885	720.0	16.6	84	7.1	7.4	121.9	22.8	225	0.25	81.3%	560.0	71.5	707	0.77	87.2%	15.2	6.4	63	86.7	78.4	775
15	N.P.	0.8067	499.2	12.2	86	7.2	7.5																
16	N.P.	0.7745	480.0	11.1	81	6.9	7.1																
17	433.593	1.2595	796.8	17.4	81	6.9	7.0	88.0	8.8	92	0.11	89.8%	193.3	43.5	456	0.53	77.5%	16.8	5.4	56	123.0	98.8	1035
18	484.034	1.4362	883.2	19.4	80	6.8	7.0																
19	487.885	1.4667	912.0	20.3	81	6.9	7.1																
20	476.501	1.2931	816.0	18.6	81	6.7	7.0																
21	448.399	1.4137	864.0	19.0	80	6.8	7.1	179.2	24.3	285	0.32	86.5%	556.7	53.0	623	0.69	90.5%	15.8	5.8	68	107.0	87.3	1026
22	N.P.	0.9830	624.0	13.8	84	7.0	7.5																
23	N.P.	0.8141	508.8	11.3	83	7.1	7.4																
24	450.612	1.3864	835.2	18.6	82	7.0	7.2																
25	461.472	1.3336	816.0	18.2	82	7.0	7.2	248.9	14.5	161	0.17	94.2%	630.0	62.0	688	0.75	90.2%	30.4	10.2	113	220.0	128.0	1420
26	480.102	1.6147	988.8	21.9	82	7.0	7.1																
27	461.826	1.3508	844.8	19.4	82	7.1	7.3																
28	399.696	1.5203	960.0	21.3	86	7.0	7.4	167.6	38.2	483	0.60	77.2%	375.0	87.0	1100	1.38	76.8%	48.9	7.8	98	386.0	157.0	1985
29	N.P.	0.7849	480.0	12.2	86	7.4	7.6																
30	N.P.	1.0220	624.0	14.2	82	6.9	7.4																
TOT.	9607.794	36.7511	22646.4	509.9						2825	3.28				6983	8.05				803			10728
AVG	457.514	1.2250	754.9	17.0	83			176.2	25.8	314	0.36	84.4%	488.8	66.1	776	0.89	84.5%	23.0	7.7	89	157.3	102.2	1192

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

JULY 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	421.955	1.3680	864.0	19.2	82	7.0	7.4	179.4	20.9	238	0.28	88.3%	430.0	67.5	768	0.91	84.3%	26.6	7.2	82	213.0	150.0	1706
2	455.553	1.2142	720.0	16.2	82	7.4	7.6																
3	470.104	1.1383	691.2	15.4	82	7.5	7.7																
4	N.P.	0.2996	182.4	4.5	83	7.2	7.3																
5	N.P.	0.3713	240.0	5.7	80	7.1																	
6	N.P.	N.F.	0.0	0.0	N.F.	N.F.																	
7	N.P.	0.4820	307.2	7.1	81	6.6	6.8																
8	421.434	0.9708	672.0	14.8	81	6.9	7.3																
9	443.010	1.2475	768.0	18.2	80	7.0	7.3	64.1	8.9	93	0.10	86.1%	673.3	47.0	488	0.55	93.0%	23.0	6.2	65	156.0	98.1	1018
10	470.402	1.1314	729.6	17.2	81	7.0	7.4																
11	474.198	1.4505	940.8	20.7	81	6.5	7.0	184.1	40.9	493	0.52	77.8%	832.5	80.5	971	1.02	90.3%	23.3	8.9	107	171.0	123.5	1490
12	419.799	1.1117	768.0	16.6	86	6.7	7.0	171.5	23.4	216	0.26	86.4%	322.5	55.0	508	0.61	82.9%	19.4	6.4	59	133.0	116.0	1072
13	N.P.	0.9437	652.8	14.2	84	7.0	7.4																
14	N.P.	0.8134	556.8	12.2	81	7.0	7.4																
15	422.439	1.1294	729.6	16.2	82	7.0	7.2																
16	461.241	1.5030	1008.0	22.3	83	7.3	7.5	195.7	14.8	185	0.20	92.4%	945.0	108.0	1350	1.46	88.6%	20.3	7.7	97	164.0	140.0	1750
17	495.034	1.3204	816.0	18.6	82	7.0	7.3																
18	458.723	1.3422	864.0	19.2	82	6.9	7.2	92.9	4.9	55	0.06	94.7%	405.0	49.5	553	0.60	87.8%	17.3	4.1	46	104.0	80.1	894
19	48.327	0.8639	537.6	12.2	82	7.0	7.2																
20	N.P.	0.8380	556.8	13.2	82	6.9	7.0																
21	N.P.	0.6147	403.2	9.3	83	6.9	7.0																
22	410.493	1.3514	883.2	19.2	84	6.9	7.1																
23	432.389	1.4222	940.8	20.9	84	7.0	7.1																
24	471.480	1.5349	1036.8	23.3	84	6.8	6.9	23.1	12.5	160	0.17	45.7%	117.5	40.0	511	0.54	66.0%	18.4	7.6	97	134.0	103.0	1315
25	464.096	1.3169	912.0	20.3	84	6.9	7.1	633.8	24.5	268	0.29	96.1%	1327.5	52.0	569	0.61	96.1%	22.2	9.8	107	147.0	117.0	1281
26	408.227	1.5525	1017.6	22.7	83	6.9	7.0																
27	N.P.	0.4579	288.0	7.1	83	7.0	7.1																
28	N.P.	0.7668	508.8	12.2	82	7.1	7.2																
29	411.917	1.3463	921.6	20.3	86	7.0	7.3																
30	461.692	1.4196	979.2	21.5	86	6.9	7.2	413.8	6.7	79	0.09	98.4%	890.0	54.0	637	0.69	93.9%	18.2	4.3	51	110.0	80.0	944
31	472.373	1.6003	1075.2	23.3	85	6.6	7.1																
TOT.	8994.886	32.9228	21571.2	483.8						1786	1.97				6355	7.00				710			11471
AVG	449.744	1.0974	719.0	16.1	80			217.6	17.5	198	0.22	85.1%	660.4	61.5	706	0.78	87.0%	21.0	6.9	79	148.0	112.0	1275



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

September 9, 1991

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Norman Lovelace
OPINAP
Environmental Protection Agency
Region 9, Attn: E-4
75 Hawthorne Street
San Francisco, California 94105

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Pago Pago, American Samoa 96799

Subject: Toxic Substance Monitoring Program
NPDES Permit No. AS0000019

StarKist Samoa hereby submits the following monitoring data as required under the Toxic Substance Monitoring Program of the above referenced NPDES Permit:

	<u>Supply Water</u> <u>(Thaw Water)</u>	<u>Effluent</u>
Cadmium	0.03	0.01
Chromium	0.17	0.09
Lead	0.37	0.17
Mercury	0.0015	0.0015
Zinc	0.22	0.10

All concentrations above are reported as milligrams per liter. Samples were collected on July 9, 1991 and analyzed by AECOS the week of August 6th.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the

Page 2
September 9, 1991

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information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Yours truly,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

cc: N. Wei
R. A. Ward
W. Adams

Copy to Pat ✓
16 JUL 1991 Su



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

July 8, 1991

Mr. Norman Lovelace ✓
OPINAP (E-4)
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Discharge Monitoring Report for the Month of May 1991 under
NPDES No. AS 0000019 as issued to StarKist Samoa, Inc.

Please find attached StarKist Samoa's Discharge Monitoring Report cover the month of May 1991. Monitoring results for the same period under US EPA's Administrative Order issued on June 18, 1990 are being submitted to the agencies under separate covers. The stormwater (discharge 002) monitoring results for the month of May are also included.

The analyses for Total Nitrogen and Total Phosphorus were performed by AECOS laboratory in Hawaii.

The final NPDES effluent limitations for Total Nitrogen and Total Phosphorus which came into effect on March 8, 1991 were exceeded during the month of May. The temperature limitation reflects the variance which was granted by the American Samoa Government to StarKist Samoa on June 7, 1991.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

Mr. Norman Lovelace
Mr. Pati Faiiai
July 8, 1991
Page 2

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persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

Attachments

cc: Ms. Sheila Wiegman - ASEPA
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

WASTE WATER SUMMARY REPORT FOR THE MONTH OF

MAY 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMITS LO HI		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PHOSPHORUS			TOTAL NITROGEN		
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	INF. MG/L	EFF. MG/L	TOTAL #/DAY
1	455.222	1.2688	652.8	14.6	84	6.8	7.2																
2	489.550	1.2824	672.0	15.2	86	6.6	7.7																
3	419.337	1.0570	576.0	13.0	86	7.0	7.3	397.4	32.9	289	0.35	91.7%	960.0	76.0	668	0.80	92.1%	22.4	9.5	84	137.0	92.8	816
4	N.P.	0.4350	220.8	5.1	84	7.0	7.1																
5	N.P.	0.4361	201.6	4.6	83	6.9																	
6	420.259	1.4055	768.0	16.6	86	6.9	7.4																
7	458.277	1.2720	691.2	15.2	86	6.7	7.2	341.2	16.0	169	0.18	95.3%	1080.0	82.5	873	0.95	92.4%	29.2	12.5	132	135.0	106.0	1121
8	492.339	1.3027	720.0	15.4	84	7.0	7.3																
9	468.936	1.3565	729.6	15.8	86	6.9	7.4																
10	436.339	1.0392	585.6	12.6	86	7.0	7.4	997.7	20.1	174	0.20	98.0%	1076.7	66.0	570	0.65	93.9%	48.2	22.9	198	369.0	285.0	2463
11	N.P.	0.5391	288.0	5.7	82	6.9	7.0																
12	N.P.	0.7514	364.8	8.1	84	6.8	7.1																
13	453.817	1.4713	748.8	16.2	86	6.8	7.4	454.8	29.7	364	0.40	93.5%	1010.0	79.0	967	1.06	92.2%	23.0	13.5	165	390.0	128.0	1566
14	452.622	1.0292	556.8	12.2	85	7.0	7.4																
15	481.600	1.4061	729.6	16.2	85	7.0	7.5																
16	482.388	1.3460	672.0	14.6	84	7.0	7.4																
17	449.927	1.2031	681.6	14.6	83	6.9	7.2	348.7	25.4	254	0.28	92.7%	536.7	91.5	915	1.02	83.0%	21.1	6.5	65	135.0	128.0	1281
18	N.P.	0.3150	153.6	3.6	86	7.2																	
19	N.P.	0.8581	432.0	9.7	86	7.0	7.3																
20	449.702	1.4823	768.0	16.6	85	7.2	7.5	129.8	8.9	109	0.12	93.2%	490.0	83.5	1029	1.14	83.0%	18.9	7.6	94	106.0	97.5	1202
21	480.469	1.3628	681.6	14.6	86	7.0	7.3																
22	456.131	1.3341	672.0	14.6	84	6.9	7.2																
23	456.460	1.0516	537.6	12.2	86	7.0	7.2																
24	444.131	1.2919	652.8	14.2	82	6.8	7.2																
25	N.P.	0.6866	326.4	7.3	82	7.0	7.2																
26	N.P.	0.3151	144.0	3.4	82	7.1																	
27	N.P.	0.2013	115.2	2.4	85	7.0	7.3																
28	449.302	1.4205	787.2	16.2	86	6.7	7.0	211.2	36.2	427	0.48	82.9%	1315.0	76.0	898	1.00	94.2%	22.2	9.8	115	170.0	134.0	1583
29	481.762	1.5289	816.0	17.4	86	6.7	7.0																
30	480.525	1.5921	825.6	17.8	85	6.9	7.2	477.3	25.8	341	0.35	94.6%	1915.0	75.5	1000	1.04	96.1%	27.9	15.8	209	215.0	137.0	1814
31	473.896	1.4432	768.0	16.6	85	7.0	7.2																
TOT.	10132.991	33.4849	17539.2	382.3																			
AVG	460.591	1.0802	565.8	12.3	85			419.8	24.4	2127	2.36		1047.9	78.8	6920	7.67		26.6	12.3	1063	207.1	138.5	11845
										266	0.30	92.7%			865	0.96	90.9%			133			1481

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 156-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

AS-0000019
PERMIT NUMBER

001
DIS

2091
SIC

14° 16'37" 170° 41'10"
LATITUDE LONGITUDE

REPORTING PERIOD: FROM

9 11 0 15 01
YEAR MO DAY

TO

9 1 0 5 3 1
YEAR MO DAY

PARAMETER		QUANTITY (3 card only)				UNITS	NO. EX	CONCENTRATION (4 card only)				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
pH	REPORTED	6.7	7.1	7.7	std.	0									
	PERMIT CONDITION	6.5		8.6	units									continuous	
Temperature	REPORTED	76	83	86	F	0									
	PERMIT CONDITION			90°									N/A	continuous	
Total Suspended Solids	REPORTED	570	865	1029	lbs./Day	0		78.8							
	PERMIT CONDITION		3,300	8,300										2/7days	composite
Total Suspended Solids	REPORTED	0.65	0.96	1.14	lbs./1,000lbs seafood	0									
	PERMIT CONDITION		3.3	8.3									N/A	2/7days	calculated
Oil and Grease	REPORTED	109	266	427	lbs./Day	0		24.4							
	PERMIT CONDITION		840	2,100										2/7days	composite
Oil and Grease	REPORTED	0.12	0.30	0.48	lbs./1,000lbs seafood	0									
	PERMIT CONDITION		0.84	2.1									N/A	2/7days	calculated
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice	W.	General Manager	9	1	0 70 8	

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-0 BY	10-10 AS-0000019 PERMIT NUMBER	117-10 001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		120-21 91	122-22 05	124-23 01	TO
		YEAR	MO	DAY	
		120-27 91	122-28 05	124-29 31	
		YEAR	MO	DAY	

PARAMETER		(3 card only)					(4 card only)					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		QUANTITY			UNITS	NO. EX	CONCENTRATION			UNITS	NO. EX		
		MINIMUM	AVERAGE	MAXIMUM			MINIMUM	AVERAGE	MAXIMUM				
Flow	REPORTED	0.2013	1.0802	1.5921	MGD	0							
	PERMIT CONDITION		2.08										
Total Nitrogen	REPORTED				lbs./day			138.5		mg./L.	1		continuous
	PERMIT CONDITION												
Total Phosphorus	REPORTED				lbs./day			0.20		mg./L.	1		2/7days composite
	PERMIT CONDITION							12.3					
	REPORTED							0.03					2/7days composite
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Callaghan Maurice W.		General Manager		9 1 0 7 0 8			
LAST	FIRST	MI	TITLE	YEAR	MO		

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 158-00473

Stormwater Monitoring

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/hr. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-5 ST	16-10 AS-0000019 PERMIT NUMBER	117-10 002 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 12" LONGITUDE
REPORTING PERIOD: FROM		120-21 91 YEAR	122-28 05 MO	123-29 01 DAY	TO
		120-27 91 YEAR	120-28 10 MO	120-31 53 DAY	

PARAMETER		(3 card only)				NO. EX	(4 card only)				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS		MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE	REPORTED	82.4	82.7	83.0	°F								
	PERMIT CONDITION											2/month	composite
TURBIDITY	REPORTED	5.23	7.765	10.3	NTU								
	PERMIT CONDITION											2/month	composite
OIL & GREASE	REPORTED	4.64	5.6	6.56	mg/l								
	PERMIT CONDITION											2/month	composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MO		
Callaghan	Maurice	W.	General Manager	91	10	17	

18 JUL 1991 *See*
Copy to Mike
Norm

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

July 8, 1991

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of May 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of May 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us on July 3rd. The delay was due to heavy work load at the laboratory.

The daily maximum and monthly average loadings for phosphorus were substantially below their respective limitations. The monthly average effluent nitrogen loading was 1,481 pounds versus the Administrative Order's limit of 1,785 pounds but exceeded 65 percent of the influent loading by 10 pounds.

For the reasons stated in our letter of May 21, 1991, we respectfully request that your agency and the federal government consider rescinding the 35 percent removal efficiency requirement in the Administrative Order. We are committed to a cleaner harbor and we cannot achieve this goal with the impediment of the 35 percent removal restriction.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the

Mr. Pati Faiai
July 8, 1991
Page 2

=====

information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

Attachment

cc: Mr. Norman Lovelace - US EPA ✓
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. William Adams

Starkist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**May 1991****Total Phosphorus**

Date May	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	1.0570	22.4	9.54	197	84
7	1.2720	29.2	12.50	309	132
10	1.0392	48.2	22.90	417	198
13	1.4713	23.0	13.50	281	165
17	1.2031	21.1	6.52	211	65
20	1.4823	18.9	7.59	233	94
28	1.4205	22.2	9.77	262	115
30	1.5921	27.9	15.80	369	209
Average	1.3172	26.61	12.27	285	133
Maximum	1.5921	48.20	22.90	417	209

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	185
Daily Maximum	320
Daily Maximum (35% removal)	271

Total Nitrogen

Date May	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	1.0570	137.00	92.80	1204	816
7	1.2720	135.00	106.00	1428	1121
10	1.0392	369.00	285.00	3189	2463
13	1.4713	390.00	128.00	4772	1566
17	1.2031	135.00	128.00	1351	1281
20	1.4823	106.00	97.50	1307	1202
28	1.4205	170.00	134.00	2008	1583
30	1.5921	215.00	137.00	2847	1814
Average	1.3172	207.13	138.54	2263	1471
Maximum	1.5921	390.00	285.00	4772	2463

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1471
Daily Maximum	2745
Daily Maximum (35% removal)	3102

18 JUN 1991



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

June 11, 1991

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of April 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of April 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us yesterday. The delay was due to heavy work load at the laboratory.

The daily maximum and monthly average loadings for phosphorus were substantially below their respective limitations. The monthly average effluent nitrogen loading was 1,198 pounds versus the Administrative Order's limit of 1,785 pounds but exceeded 65 percent of the influent loading by a small margin.

There were also two days in April when the effluent nitrogen loadings exceeded 65 percent of the maximum influent loading for the month.

For the reasons stated in our letter of May 21, 1991, we respectfully request that your agency and the federal government consider rescinding the 35 percent removal efficiency requirement in the Administrative Order. We are committed to a cleaner harbor and we cannot achieve this goal with the impediment of the 35 percent removal restriction.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

Mr. Pati Faiai
June 11, 1991
Page 2

persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Callaghan', with a stylized flourish at the end.

Maurice Callaghan
General Manager

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. Bill Adams

Attachment

ADMINISTRATIVE ORDER COMPLIANCE REPORT**April 1991****Total Phosphorus**

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7893	16.50	5.91	246	88
5	1.4576	32.50	9.36	394	113
9	1.5353	17.00	9.31	217	119
12	1.4089	18.50	11.60	217	136
18	1.6401	9.38	7.53	128	103
19	1.3090	35.30	11.10	384	121
22	1.3898	20.20	11.50	233	133
26	1.0881	24.80	14.10	224	128
29	1.3229	36.60	2.71	403	30
Average	1.4379	23.42	9.24	272	108
Maximum	1.7893	36.60	14.10	403	136

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	177
Daily Maximum	320
Daily Maximum (35% removal)	262

Total Nitrogen

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7893	96.2	86.9	1431	1293
5	1.4576	135.0	93.7	1636	1136
9	1.5353	102.0	121.0	1302	1545
12	1.4089	123.0	118.0	1441	1383
18	1.6401	163.0	78.9	2223	1076
19	1.3090	207.0	155.0	2253	1687
22	1.3898	143.0	94.9	1653	1097
26	1.0881	177.0	77.7	1602	703
29	1.3229	173.0	78.0	1903	858
Average	1.4379	146.58	100.46	1716	1198
Maximum	1.7893	207.00	155.00	2253	1687

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1115
Daily Maximum	2745
Daily Maximum (35% removal)	1465



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

June 11, 1991

(684) 644-4231
FAX NO: (684) 644-2440

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of April 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of April 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us yesterday. The delay was due to heavy work load at the laboratory.

As with the results in March, the daily maximum and monthly average loadings for nitrogen and phosphorus were substantially below their respective limitations. For example, the monthly average effluent nitrogen loading was 1,198 pounds versus the Administrative Order's limit of 1,785 pounds. The monthly average effluent phosphorus loading was 108 pounds as compared with the Order's limit of 170 pounds.

However, there were two days in April when the effluent nitrogen loadings exceeded 65 percent of the maximum influent loading for the month.

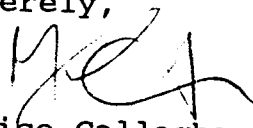
For the reasons stated in our letter of May 21, 1991, we respectfully request that your agency and the federal government consider rescinding the 35 percent removal efficiency requirement in the Administrative Order. We are committed to a cleaner harbor and we cannot achieve this goal with the impediment of the 35 percent removal restriction.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

Mr. Pati Faiai
June 11, 1991
Page 2

persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,



Maurice Callaghan
General Manager

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Norman Wei
Mr. Ralph A. Ward
Mr. William Adams

Attachment

ADMINISTRATIVE ORDER COMPLIANCE REPORT

April 1991

Total Phosphorus

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7893	16.50	5.91	246	88
5	1.4576	32.50	9.36	394	113
9	1.5353	17.00	9.31	217	119
12	1.4089	18.50	11.60	217	136
18	1.6401	9.38	7.53	128	103
19	1.3090	35.30	11.10	384	121
22	1.3898	20.20	11.50	233	133
26	1.0881	24.80	14.10	224	128
29	1.3229	36.60	2.71	403	30
Average	1.4379	23.42	9.24	272	108
Maximum	1.7893	36.60	14.10	403	136

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Daily Maximum	320
Daily Maximum (35% removal)	262

Total Nitrogen

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7893	96.2	86.9	1431	1293
5	1.4576	135.0	93.7	1636	1136
9	1.5353	102.0	121.0	1302	1545
12	1.4089	123.0	118.0	1441	1383
18	1.6401	163.0	78.9	2223	1076
19	1.3090	207.0	155.0	2253	1687
22	1.3898	143.0	94.9	1653	1097
26	1.0881	177.0	77.7	1602	703
29	1.3229	173.0	78.0	1903	858
Average	1.4379	146.58	100.46	1716	1198
Maximum	1.7893	207.00	155.00	2253	1687

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Daily Maximum	2745
Daily Maximum (35% removal)	1465



*disregard letter
as per N.Wii*

25 JUN 1991 *Sm*

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

June 11, 1991

(684) 644-4231

FAX NO: (684) 644-2440

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of April 1991 under the U.S.
EPA's Administrative Order to StarKist Samoa

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As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

Mr. Pati Faiai
June 11, 1991
Page 2

persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

cc: ~~Mr. Norman Weigman - US EPA~~
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Ralph A. Ward
Mr. Norman Wei
Mr. Bill Adams

Attachment

ADMINISTRATIVE ORDER COMPLIANCE REPORT

April 1991

Total Phosphorus

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
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Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Monthly Average (35% removal)	177
Daily Maximum	320
Daily Maximum (35% removal)	262

Total Nitrogen

Date April	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
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19	1.3090	207.0	155.0	2253	1687
22	1.3898	143.0	94.9	1653	1097
26	1.0881	177.0	77.7	1602	703
29	1.3229	173.0	78.0	1903	858
Average	1.4379	146.58	100.46	1716	1198
Maximum	1.7893	207.00	155.00	2253	1687

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Monthly Average (35% removal)	1115
Daily Maximum	2745
Daily Maximum (35% removal)	1465

Received
30 MAY 1991



StarKist SAMOA, Inc.

P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799



Copy to Mike,
Norm

May 21, 1991

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Re: Monitoring Results for the Month of March 1991 under the
U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of March 1991 as required under US EPA's Administrative Order issued on June 18, 1990. All the analyses were performed by AECOS laboratory in Hawaii. The laboratory results for the month were transmitted to us yesterday. The delay was due to some unscheduled equipment maintenance at the laboratory.

All the daily maximum and monthly average limitations for nitrogen and phosphorus were met. In fact, the monthly average loadings for both of these parameters were substantially below the Administrative Order's limitations.

There were two days in March when the effluent nitrogen loadings exceeded 65 percent of the maximum influent loading for the month. These are violations in accordance with the rules set forth by the U.S. EPA even though the monthly average loading was almost less than half of the limitation.

In reviewing the influent and effluent data since the canneries began high strength waste segregation, it is apparent that the removal efficiency of the DAF cell for nitrogen decreases as the influent loading decreases. This presents a dilemma for our plant especially since we are striving to reduce the nutrient loading to the harbor as much as possible through reduction at the source. For example, we have already purchased an industrial vacuuming device at considerable expense in order to further reduce the loading of fish scrap (nitrogen and phosphorus) to the treatment plant. A successful source reduction program will reduce the loading to the harbor but at the same time also reduce the removal efficiency for the treatment plant and hence may subject the cannery to severe stipulated penalties.

Mr. Pati Faiai
May 21, 1991
Page 2

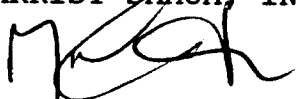
We respectfully request that your agency and the federal government consider rescinding the 35 percent removal efficiency requirement in the Administrative Order.

Without the removal of this requirement and given the severe stipulated penalties associated with it, we would have no choice but to eliminate our source reduction program. This would be an unfortunate step backward and contrary to what we are all striving for - a cleaner Pago Pago Harbor. We are committed to a cleaner harbor and we sincerely believe that we can achieve that goal better without the impediment of the 35 percent removal restriction.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

cc: Mr. Norman Lovelace - US EPA
Ms. Sheila Wiegman - ASEPA
Ms. Virginia Gibbons - Assistant Attorney General
Mr. Norman Wei
Mr. Ralph A. Ward
Mr. William Adams

StarKist Samoa, Inc.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**March 1991****Total Phosphorus**

Date March	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7030	7.30	3.51	103	50
4	1.9100	7.10	3.21	113	51
8	1.6844	7.50	3.76	105	53
11	1.7955	6.70	2.92	100	44
15	1.5325	15.20	5.77	194	74
20	1.7888	26.70	11.50	397	171
22	1.9861	20.90	8.02	345	132
25	1.7553	12.90	8.13	188	119
29	2.0035	19.50	8.03	325	134
Average	1.7955	13.76	6.09	208	92
Maximum	2.0035	26.70	11.50	397	171

Administrative Order Limitations for Total Phosphorus

Monthly Average	170
Daily Maximum	320
Daily Maximum (35% removal)	258

Total Nitrogen

Date March	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.7030	72.00	54.10	1020	766
4	1.9100	66.30	50.70	1053	805
8	1.6844	65.30	48.30	915	677
11	1.7955	51.00	37.90	762	566
15	1.5325	83.80	79.10	1068	1008
20	1.7888	135.00	92.70	2008	1379
22	1.9861	114.00	81.50	1883	1346
25	1.7553	64.30	66.80	939	975
29	2.0035	91.80	73.70	1529	1228
Average	1.7955	82.61	64.98	1242	972
Maximum	2.0035	135.00	92.70	2008	1379

Administrative Order Limitations for Total Nitrogen

Monthly Average	1785
Daily Maximum	2745
Daily Maximum (35% removal)	1305

Star-Kist Samoa

6/7/91

TOTAL NITROGEN

Date	I N F L U E N T			(Inf. Load x 0.65)	E F F L U E N T			% Removal	DAILY MAX IEL VIOLA
	Flow	Conc.	Load		Flow	Conc.	Load		
3/1/91	1.7030	72.0	1023	665	1.7030	54.1	768	25	NO
3/4/91	1.9100	66.3	1056	686	1.9100	50.7	808	24	NO
3/8/91	1.6844	65.3	917	596	1.6844	48.3	679	26	NO
3/11/91	1.7955	51.0	764	496	1.7955	37.9	568	26	NO
3/15/91	1.5325	83.8	1071	696	1.5325	79.1	1011	6	NO
3/20/91	1.7888	135.0	2014	1309	1.7888	92.7	1383	31	YES
3/22/91	1.9861	114.0	1888	1227	1.9861	81.5	1350	29	YES
3/25/91	1.7553	64.3	941	612	1.7553	66.8	978	-4	NO
3/29/91	2.0035	91.8	1534	997	2.0035	73.7	1231	20	NO

Monthly
Average

1245

809975

20

MONTHLY AVERAGE IEL

809.4

VIOLATION:

YES

Daily
Maximum

1309

DAILY MAXIMUM IEL

1309

DAILY MAXIMUM VIOLATIONS:

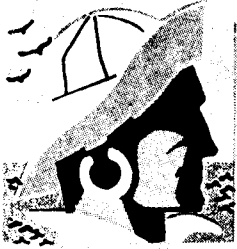
2

Star-Kist Samoa

6/10/91

TOTAL PHOSPHORUS

Date	I N F L U E N T			(Inf. Load x 0.65)	E F F L U E N T			% Removal	MONTHLY M IEL VIOLA
	Flow	Conc.	Load		Flow	Conc.	Load		
3/1/91	1.7030	7.3	104	67	1.7030	3.5	50	52	NO
3/4/91	1.9100	7.1	113	74	1.9100	3.2	51	55	NO
3/8/91	1.6844	7.5	105	68	1.6844	3.8	53	50	NO
3/11/91	1.7955	6.7	100	65	1.7955	2.9	44	56	NO
3/15/91	1.5325	15.2	194	126	1.5325	5.8	74	62	NO
3/20/91	1.7888	26.7	398	259	1.7888	11.5	172	57	NO
3/22/91	1.9861	20.9	346	225	1.9861	8.0	133	62	NO
3/25/91	1.7553	12.9	189	123	1.7553	8.1	119	37	NO
3/29/91	2.0035	19.5	326	212	2.0035	8.0	134	59	NO
Monthly Average			208	135			92	54	
MONTHLY AVERAGE IEL			135.4						
VIOLATION:			NO						
Daily Maximum				259					
DAILY MAXIMUM IEL			259						
DAILY MAXIMUM VIOLATIONS			0						



Star-Kist Samoa, Inc.

EPA recd
1 APR 1991
Orig. to Mike

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

26 March 1991

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: StarKist Samoa Inc. NPDES No. AS 0000019 and Monitoring Results under the US EPA's Administrative Order Quarterly Report

Attached is the Discharge Monitoring Report covering the three month period from ~~November 1990~~ through February 1991. All NPDES permit limits were met.

Also enclosed are StarKist Samoa's monitoring results from December 1990 through February 1991 as required under US EPA's Administrative Order. All interim effluent limitations for phosphorus and nitrogen were met.

The storm water (discharge 002) for the month of February 1991 is also reported.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible



Mr. Norman Lovelace
Mr. Pati Faiai
26 March 1991
=====

for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.



Maurice Callaghan
General Manager

MC:ht\npdes\samoa

Attachments

cc: Sheila Wiegman

STARKIST SAMOA, INC.

**ADMINISTRATIVE ORDER COMPLIANCE REPORT
December 1990**

Total Phosphorus					
Date December	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	2.0839	37.58	5.26	651	91
7	1.8362	33.24	8.90	508	136
10	1.9518	28.84	9.28	468	151
14	2.0977	15.82	4.08	276	71
17	1.9982	29.46	9.09	490	151
21	1.9759	51.18	15.64	841	257
Average	1.9906	32.7	8.7	539	143
Maximum	2.0977	51.2	15.6	841	257

Total Nitrogen					
Date December	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
3	2.0839	75.83	54.70	1314	949
7	1.8362	103.80	68.73	1585	1049
10	1.9518	184.90	50.45	3001	819
14	2.0977	102.22	54.75	1783	955
17	1.9982	103.64	63.13	1726	1049
21	1.9759	104.67	44.20	1720	726
Average	1.9906	112.5	56.0	1855	925
Maximum	2.0977	184.9	68.7	3001	1049

All effluent limitations for phosphorus and nitrogen were met for this month.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**January 1991****Total Phosphorus**

Date January	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
7	1.5879	17.66	3.60	233	48
11	1.9969	30.76	8.75	511	145
14	1.7546	35.96	6.66	525	97
18	1.9419	39.65	4.75	640	77
21	1.9096	15.97	2.54	254	40
25	1.7172	24.06	6.43	344	92
28	1.8250	23.68	4.11	359	62
Average	1.8190	26.82	5.26	409	80
Maximum	1.9969	39.65	8.75	640	145

Total Nitrogen

Date January	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
7	1.5879	81.22	65.81	1073	869
11	1.9969	78.53	53.96	1304	896
14	1.7546	103.61	61.60	1512	899
18	1.9419	115.35	67.25	1863	1086
21	1.9096	109.25	46.22	1735	734
25	1.7172	131.72	63.07	1881	901
28	1.8250	134.49	56.06	2041	851
Average	1.8190	107.74	59.14	1630	891
Maximum	1.9969	134.49	67.25	2041	1086

All effluent limitations for phosphorus and nitrogen were met for this month.

ADMINISTRATIVE ORDER COMPLIANCE REPORT**February 1991****Total Phosphorus**

Date February	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.6419	22.06	9.83	301	134
4	1.4367	26.50	7.34	317	88
8	1.7233	19.76	7.71	283	110
11	1.6275	22.23	6.08	301	82
15	1.5933	33.97	9.67	450	128
19	1.8779	24.62	7.99	384	125
23	1.5160	21.74	6.14	274	77
25	1.5080	20.71	5.60	260	70
Average	1.6156	23.95	7.54	321	102
Maximum	1.8779	33.97	9.83	450	134

Total Nitrogen

Date February	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
1	1.6419	89.76	50.45	1226	689
4	1.4367	78.47	51.80	937	619
8	1.7233	125.19	65.47	1794	938
11	1.6275	117.96	62.66	1597	848
15	1.5933	169.75	95.73	2249	1268
19	1.8779	96.98	48.67	1514	760
23	1.5160	121.00	71.00	1525	895
25	1.5080	108.00	70.00	1354	878
Average	1.6156	113.39	64.47	1525	862
Maximum	1.8779	169.75	95.73	2249	1268

All effluent limitations for phosphorus and nitrogen were met for this month.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 15-RD073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

ST	AS-0000019 PERMIT NUMBER	001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		9 10 YEAR	1 2 MO	0 1 DAY	TO
		9 10 YEAR	1 2 MO	3 1 DAY	

PARAMETER		(3 card only) QUANTITY					UNITS	NO. EX	(4 card only) CONCENTRATION					UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM					MINIMUM	AVERAGE	MAXIMUM						
pH	REPORTED	6.5	7.0	7.8			std. units	0									
	PERMIT CONDITION	6.5		8.6												continuous	
Temperature	REPORTED	80°	85°	90°			F	0									
	PERMIT CONDITION			90°											N/A	continuous	
Total Suspended Solids	REPORTED	641	779	930			lbs./Day	0		46.9					mg./L.		
	PERMIT CONDITION		3,300	8,300												2/7days	composite
Total Suspended Solids	REPORTED	0.80	1.04	1.46			lbs./1,000lbs seafood	0									
	PERMIT CONDITION		3.3	8.3											N/A	2/7days	calculated
Oil and Grease	REPORTED	76	164	354			lbs./Day	0		10.0					mg./L.		
	PERMIT CONDITION		840	2,100												2/7days	composite
Oil and Grease	REPORTED	0.09	0.22	0.44			lbs./1,000lbs seafood	0									
	PERMIT CONDITION		0.84	2.1											N/A	2/7days	calculated
	REPORTED																
	PERMIT CONDITION																
	REPORTED																
	PERMIT CONDITION																

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN	MAURICE W.	GENERAL MANAGER	9 11 0 13 2 15				
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

ST **AS-0000019** PERMIT NUMBER

DIS **001** SIC **2091**

LATITUDE **14° 16' 37"** LONGITUDE **170° 41' 10"**

REPORTING PERIOD: FROM **9/01/2011** TO **9/10/2011**

YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.1950	1.5642	2.2793	MGD	0									
	PERMIT CONDITION		2.08												
Total Nitrogen	REPORTED	726	925	1049	lbs./day	0		56.0							
	PERMIT CONDITION		2200	4300											
Total Phosphorus	REPORTED	71	143	257	lbs./day	0		8.7							
	PERMIT CONDITION		440	750											
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER
CALLAGHAN MAURICE W.

LAST FIRST MI

TITLE OF THE OFFICER
GENERAL MANAGER

TITLE

DATE
9/10/2011

YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief each item of information is true, complete, and accurate.

[Signature]

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 156-R0073

INSTRUCTIONS

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AS-0000019

PERMIT NUMBER

001

DIS

2091

SIC

14° 16' 37"

LATITUDE

170° 41' 10"

LONGITUDE

REPORTING PERIOD: FROM

9 1 01 0 1 1
YEAR MO DAY

TO

9 1 01 3 1 1
YEAR MO DAY

PARAMETER		QUANTITY					CONCENTRATION					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX		
pH	REPORTED	6.6	7.0	7.2	std. units	0							
	PERMIT CONDITION	6.5		8.6									
Temperature	REPORTED	79°	85°	90°	F	0							continuous
	PERMIT CONDITION			90°									
Total Suspended Solids	REPORTED	353	904	1801	lbs./Day	0		58.7				N/A	continuous
	PERMIT CONDITION		3,300	8,300									mg./L.
Total Suspended Solids	REPORTED	0.54	1.19	2.30	1,000lbs seafood	0							2/7days composite
	PERMIT CONDITION		3.3	8.3									
Oil and Grease	REPORTED	72	168	293	lbs./Day	0		11.1				N/A	2/7days calculated
	PERMIT CONDITION		840	2,100									mg./L.
Oil and Grease	REPORTED	0.09	0.23	0.40	1,000lbs seafood	0							2/7days composite
	PERMIT CONDITION		0.84	2.1									
	REPORTED											N/A	2/7days calculated
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN MAURICE W.	GENERAL MANAGER	9 11 01 3 1 1		

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 158-R0073

INSTRUCTIONS

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15-B ST	15-10 AS-0000019 PERMIT NUMBER	17-10 001 DIS	2091 SIC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		91 01 01 YEAR MO DAY	TO	91 01 13 YEAR MO DAY	

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM				
Flow	REPORTED	0.1002	1.5011	2.1118	MGD	0								
	PERMIT CONDITION		2.08								N/A	continuous		
Total Nitrogen	REPORTED	734	891	1086	lbs./day	0		59.1			mg./L.			
	PERMIT CONDITION		2200	4300								2/7days	composite	
Total Phosphorus	REPORTED	40	80	145	lbs./day	0		5.3			mg./L.			
	PERMIT CONDITION		440	750								2/7days	composite	
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
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	REPORTED													
	PERMIT CONDITION													

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CALLAGHAN	MAURICE	W.	GENERAL MANAGER			91	01	25						
LAST	FIRST	MI	TITLE	YEAR	MO	DAY								

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 158-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

15-B
ST

16-10
AS-0000019
PERMIT NUMBER

117-10
001 2091
DIS SIC

14° 16' 37" 170° 41' 10"
LATITUDE LONGITUDE

REPORTING PERIOD: FROM

130-211 122-212 124-213
9 11 0 12 0 1
YEAR MO DAY

TO

126-271 130-281 130-311
9 11 0 12 2 18
YEAR MO DAY

PARAMETER		(3 card only) QUANTITY (130-40) (140-50) (150-60)					UNITS	NO. EX	(4 card only) CONCENTRATION (16-10) (17-20) (18-30)					UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE			MAXIMUM								
pH	REPORTED	6.6	6.9	7.4		std. units	0										
	PERMIT CONDITION	6.5		8.6												continuous	
Temperature	REPORTED	78°	85°	90°		F	0										
	PERMIT CONDITION			90°									N/A			continuous	
Total Suspended Solids	REPORTED	568	899	1519		lbs./Day	0		66.4				mg./L.				
	PERMIT CONDITION		3,300	8,300												2/7days composite	
Total Suspended Solids	REPORTED	0.75	1.23	2.10		lbs./1,000lbs seafood	0										
	PERMIT CONDITION		3.3	8.3									N/A			2/7days calculated	
Oil and Grease	REPORTED	114	489	833		lbs./Day	0		35.6				mg./L.				
	PERMIT CONDITION		840	2,100												2/7days composite	
Oil and Grease	REPORTED	0.17	0.66	1.18		lbs./1,000lbs seafood	0										
	PERMIT CONDITION		0.84	2.1									N/A			2/7days calculated	
	REPORTED																
	PERMIT CONDITION																
	REPORTED																
	PERMIT CONDITION																

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN MAURICE W.		GENERAL MANAGER		9 11 0 12 31 5			
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	PAGE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 136-00073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

(12-5) ST	(16-10) AS-0000019 PERMIT NUMBER	(17-19) 001 DIS	2091 SIC	(14-16) 14° 16' 37" LATITUDE	(17-19) 170° 41' 10" LONGITUDE
REPORTING PERIOD FROM			(20-21) 9 YEAR	(22-23) 10 MO	(24-25) 12 DAY
TO			(26-27) 9 YEAR	(28-29) 01 MO	(30-31) 28 DAY

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM				
Flow	REPORTED	0.4254	1.4656	2.1890	MGD	0								
	PERMIT CONDITION		2.08											
Total Nitrogen	REPORTED	619	862	1269	lbs./day	0		64.5						
	PERMIT CONDITION		2200	4300										
Total Phosphorus	REPORTED	70	102	134	lbs./day	0		7.5						
	PERMIT CONDITION		440	750										
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													
	REPORTED													
	PERMIT CONDITION													

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN	MAURICE W.	GENERAL MANAGER	9/10/32	25			
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Form Approved
OMB NO. 156-00073

INSTRUCTIONS

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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
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15-5 ST	16-10 AS-0000019 PERMIT NUMBER	117-10 002 DIS	209 SIC	14° 16' 37" 170° 41' 12" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		91 02 01 YEAR MO DAY	TO	91 02 28 YEAR MO DAY

PARAMETER		QUANTITY				UNITS	CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM			MINIMUM	AVERAGE	MAXIMUM				
TEMPERATURE	REPORTED	78.7°	80.15°	81.6°	°F								
	PERMIT CONDITION		-	-								2/month	composite
TURBIDITY	REPORTED	1.34	1.54	1.74	NTU								
	PERMIT CONDITION		-	-								2/month	composite
OIL & GREASE	REPORTED	18.03	20.98	23.93	mg/l								
	PERMIT CONDITION		-	-								2/month	composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN	MAURICE W.	GENERAL	MANAGER	91	03 25		
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

WASTE WATER SUMMARY REPORT FOR THE MONTH OF DECEMBER 1990

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	PH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L
1	N.P.	0.5937	288.0	6.7	90	7.1	7.3											
2	N.P.	0.9861	470.4	10.5	90	7.1	7.4											
3	396.783	2.0839	1056.0	22.7	89	6.9	7.2	156.1	4.8	84	0.11	96.9%	450.0	48.0	832	1.05	89.3%	37.6
4	399.974	2.2061	1113.6	24.1	90	6.7	7.5											
5	401.063	1.8844	921.6	20.3	89	6.8	7.1											
6	401.791	1.9817	960.0	22.7	89	7.1	7.6											
7	401.203	1.8362	960.0	20.7	89	6.9	7.8	80.0	5.0	76	0.09	93.8%	298.8	42.0	641	0.80	85.9%	33.2
8	N.P.	0.7474	384.0	8.5	86	7.0	7.2											
9	N.P.	0.8399	403.2	8.9	84	6.6	7.3											
10	400.465	1.9518	998.4	21.5	87	6.5	7.0	84.9	21.8	354	0.44	74.3%	315.0	44.3	720	0.90	85.9%	28.8
11	406.561	2.2793	1094.4	23.9	86	6.6	7.2											
12	406.865	2.1530	1075.2	23.3	85	6.6	7.1											
13	380.103	2.0605	1056.0	22.7	87	6.8	7.3											
14	318.512	2.0977	1075.2	23.1	90	7.2	7.5	88.7	8.2	144	0.23	90.7%	560.0	53.3	930	1.46	90.5%	15.8
15	N.P.	0.7648	364.8	8.1	86	6.9	7.5											
16	N.P.	1.3400	537.6	11.3	88	6.9	7.5											
17	386.609	1.9982	1008.0	21.5	86	7.1	7.6	61.8	9.4	156	0.20	84.8%	315.0	51.0	847	1.10	83.8%	29.5
18	395.885	2.2320	1104.0	23.5	88	6.7	7.6											
19	384.258	1.9616	988.8	21.3	90	6.5	7.0											
20	391.789	2.0594	1056.0	22.3	89	6.7	7.0											
21	366.457	1.9759	1008.0	21.5	90	6.5	7.0	64.2	10.5	172	0.23	83.7%	270.0	42.7	701	0.96	84.2%	51.2
22	N.P.	1.0788	537.6	11.3	87	7.0	7.3											
23	N.P.	0.2332	105.6	2.4	87	6.8	7.0											
24	N.P.	0.1950	86.4	2.0	84	6.8	6.9											
25	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
26	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
27	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
28	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
29	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
30	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
31	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
TOT.	5838.318	37.5406	18652.8	404.8						986	1.30				4672	6.26		
AVG		1.5642	777.2	16.9	88			89.3	10.0	164	0.22	87.4%	368.1	46.9	779	1.04	86.6%	32.7

WASTE WATER SUMMARY REPORT FOR THE MONTH OF JANUARY 1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					INF. MG/L
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	
1	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
2	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
3	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
4	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
5	N.P.	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.											
6	N.P.	0.4400	211.2	5.1	84	6.8	6.9											
7	324.870	1.5879	768.0	16.6	86	6.9	7.0	105.3	14.6	193	0.30	86.1%	190.8	26.8	353	0.54	86.0%	17.
8	332.861	1.8042	940.8	20.3	87	6.9	7.1											
9	356.660	1.9720	979.2	21.1	90	6.9	7.0											
10	382.919	1.8971	960.0	20.9	88	6.9	7.0											
11	366.789	1.9969	1017.6	21.7	88	6.6	7.0	129.0	17.7	293	0.40	86.3%	370.0	38.5	639	0.87	89.6%	30.
12	N.P.	0.1002	48.0	1.2	82	7.0	7.2											
13	N.P.	1.3052	614.4	13.2	83	7.0	7.2											
14	375.946	1.7546	912.0	19.6	88	6.9	7.2	144.9	10.6	154	0.21	92.7%	693.3	69.0	1007	1.34	90.0%	36.
15	397.464	1.9547	998.4	21.3	88	7.0	7.2											
16	397.435	1.9177	979.2	20.9	88	7.0	7.2											
17	404.983	1.9569	988.8	21.5	89	7.1	7.2											
18	390.909	1.9419	1008.0	21.7	90	7.0	7.2	119.0	13.6	219	0.28	88.6%	1114.8	111.5	1801	2.30	90.0%	39.
19	N.P.	0.4416	192.0	4.8	90	7.0	7.2											
20	N.P.	0.8848	432.0	9.7	87	6.9	7.1											
21	399.731	1.9096	998.4	21.1	87	6.9	7.0	55.0	4.6	72	0.09	91.7%	326.7	86.7	1376	1.72	73.5%	16.
22	411.180	2.1118	1036.8	22.3	87	7.0	7.1											
23	421.628	1.7672	892.8	19.2	89	7.0	7.2											
24	420.352	1.5816	787.2	17.2	86	6.9	7.1											
25	359.395	1.7172	883.2	18.2	90	6.8	7.0	71.1	9.8	140	0.19	86.2%	623.3	48.0	685	0.95	92.3%	24.
26	N.P.	0.4672	211.2	4.9	90	6.8	7.1											
27	N.P.	0.5138	268.8	5.3	80	6.8	7.0											
28	385.313	1.8250	940.8	19.4	87	6.8	7.0	70.2	7.1	108	0.14	89.9%	295.8	30.7	465	0.60	89.6%	23.
29	390.188	1.7301	902.4	18.6	87	6.7	7.2											
30	395.076	1.7728	883.2	18.2	87	6.8	7.0											
31	399.561	1.6763	844.8	17.6	88	6.7	7.0											
TOT.	7313.260	39.0283	19699.2	421.6						1179	1.61				6327	8.34		
AVG		1.5011	757.7	16.2	87			99.2	11.1	169	0.23	88.8%	516.4	58.7	904	1.19	87.3%	26.

WASTE WATER SUMMARY REPORT FOR THE MONTH OF FEBRUARY

1991

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL P
						LO	HI	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L
1	361.626	1.6419	768.0	16.8	90	6.7	7.0	306.4	48.1	656	0.91	84.3%	563.3	72.7	992	1.37	87.1%	22.1
2	N.P.	0.7355	364.8	8.5	88	6.7	7.2											
3	N.P.	0.6525	307.2	6.9	85	7.0	7.3											
4	380.852	1.4367	720.0	15.8	86	6.6	7.1	224.2	44.2	527	0.69	80.3%	403.3	47.5	568	0.75	88.2%	26.5
5	381.879	1.8150	912.0	19.4	89	6.6	7.0											
6	410.547	1.8463	921.6	19.4	88	6.6	7.0											
7	433.836	1.7572	864.0	18.6	87	6.6	7.0											
8	361.085	1.7233	883.2	18.8	87	7.0	7.2	186.1	54.7	783	1.08	70.6%	646.7	106.0	1519	2.10	83.6%	19.8
9	N.P.	0.5695	268.8	6.1	89	6.6	7.1											
10	N.P.	0.6273	307.2	6.7	85	6.8	7.1											
11	394.160	1.6275	816.0	17.2	88	6.7	7.1	195.8	37.3	504	0.64	81.0%	663.3	72.5	981	1.24	89.1%	22.3
12	349.943	1.7172	864.0	18.6	90	6.7	7.0											
13	391.123	2.0687	1036.8	22.3	88	6.7	7.0											
14	405.152	1.7078	854.4	18.6	90	6.6	7.0											
15	336.557	1.5933	768.0	16.6	90	6.6	7.2	609.7	8.6	114	0.17	98.6%	770.0	72.7	963	1.43	90.6%	34.0
16	N.P.	0.6829	316.8	7.1	87	6.9	7.1											
17	N.P.	0.4254	192.0	4.5	87	7.0	7.1											
18	N.P.	0.7968	384.0	8.5	84	7.0	7.2											
19	363.521	1.8779	921.6	19.8	88	6.6	7.2	100.3	7.6	118	0.16	92.5%	350.0	52.0	812	1.12	85.1%	24.6
20	351.780	1.9541	960.0	20.3	88	7.0	7.2	625.3	51.2	833	1.18	91.8%						
21	401.101	1.9201	969.6	20.9	87	6.6	7.2											
22	403.678	1.8931	940.8	20.3	86	6.8	7.2											
23	352.324	1.5160	787.2	17.2	90	7.0	7.3	204.2	11.4	144	0.20	94.4%	1475.0	56.3	709	1.01	96.2%	21.7
24	N.P.	0.9654	480.0	10.1	87	6.8	7.4											
25	385.718	1.5080	768.0	16.8	86	6.8	7.3	590.0	57.2	718	0.93	90.3%	942.5	51.5	646	0.84	94.5%	20.7
26	409.629	1.8549	921.6	19.2	88	6.8	7.2											
27	416.611	2.1890	1075.2	23.1	88	6.8	7.2											
28	437.805	1.9341	960.0	20.7	90	7.1	7.2											
TOT.	7728.927	41.0374	20332.8	438.8						4397	5.97				7190	9.86		
AVG		1.4656	726.2	15.7	88			338.0	35.6	489	0.66	87.1%	726.8	66.4	899	1.23	89.3%	24.0



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

17 December 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: StarKist Samoa Inc. NPDES No. AS 0000019 Quarterly Report and Monitoring Results for the Month of November 1990 under the U.S. EPA's Administrative Order to StarKist Samoa

Attached is the Discharge Monitoring Report covering the three month period from September 1990 through November 1990. All NPDES permit limits were met.

Also enclosed are StarKist Samoa's monitoring results for the month of November 1990 as required under US EPA's Administrative Order issued on June 18, 1990. All the daily maximum and monthly average interim limitations for total phosphorus and total nitrogen were met for November.

In accordance with discussions between Norman Wei and Pat Young, future Administrative Order compliance reports for phosphorus and nitrogen will be submitted on a quarterly basis together with the NPDES Discharge Monitoring Reports.

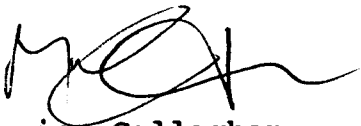
As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly

original to [unclear]
copy to Pat Young +
EPA [unclear]
26 DEC 1990

Mr. Norman Lovelace
Mr. Pati Faiai
17 December 1990

responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Callaghan', with a stylized, flowing script.

Maurice Callaghan
General Manager

Enclosures

ADMINISTRATIVE ORDER COMPLIANCE REPORT

November 1990

Total Phosphorus

Date November	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
2	1.9430	39.00	12.20	630	197
5	2.0129	44.20	14.80	740	248
9	1.9790	46.30	5.70	762	94
12	1.9308	27.88	8.07	448	130
16	2.0551	19.76	5.58	338	95
19	1.9438	34.64	9.65	560	156
21	1.9034	18.90	7.39	299	117
26	1.7788	26.58	6.92	393	102
30	2.0015	39.38	12.68	655	211
Average	1.9498	32.96	9.22	536	150
Maximum	2.0551	46.30	14.80	762	248

Total Nitrogen

Date November	Flow mgd	Influent mg/l	Effluent mg/l	Influent #/day	Effluent #/day
2	1.9430	193.30	88.30	3123	1427
5	2.0129	196.20	79.90	3284	1337
9	1.9790	104.46	56.10	1719	923
12	1.9308	81.33	35.06	1306	563
16	2.0551	61.75	35.02	1055	598
19	1.9438	193.27	119.06	3124	1925
21	1.9034	120.49	64.43	1907	1020
26	1.7788	137.35	81.28	2032	1202
30	2.0015	173.83	64.50	2893	1074
Average	1.9498	140.22	69.29	2272	1119
Maximum	2.0551	196.20	119.06	3284	1925

All effluent limitations for phosphorus and nitrogen were met for this month.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-90073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "— hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-B ST	10-10 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 MC	14° 16' 37" LATITUDE	170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		120-211 9 10 YEAR	122-22 0 9 MO	124-23 0 1 DAY	TO
		120-27 9 0 YEAR	122-28 0 9 MO	124-29 3 10 DAY	

PARAMETER		(3 card only)					(4 card only)					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX		
pH	REPORTED	6.6	7.1	8.2	std. units	0							
	PERMIT CONDITION	6.5		8.6									continuous
Temperature	REPORTED	72	82	90	° F	0							
	PERMIT CONDITION			90°									continuous
Total Suspended Solids	REPORTED	670	1282	1678	lbs./Day	0		83.0					
	PERMIT CONDITION		3,300	8,300									2/7days composite
Total Suspended Solids	REPORTED	0.89	2.15	3.70	lbs./1,000lbs seafood	0							
	PERMIT CONDITION		3.3	8.3									2/7days calculated
Oil and Grease	REPORTED	11.0	166.0	516.0	lbs./Day	0		11.7					
	PERMIT CONDITION		840	2,100									2/7days composite
Oil and Grease	REPORTED	0.02	0.32	1.42	lbs./1,000lbs seafood	0							
	PERMIT CONDITION		0.84	2.1									2/7days calculated
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief each item of information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN MAURICE W.		GENERAL MANAGER		9 10 12 0 18			
LAST	FIRST	MI	TITLE	YEAR	MO		

ORIGINAL

PAGE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-50073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

12-5 ST	14-10 AS-0000019 PERMIT NUMBER	117-10 001 DIS	2091 MC	14° 16' 37" 170° 41' 10" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		120-21 9 10 YEAR MO	120-22 0 19 DAY	TO
		120-27 9 10 YEAR MO	120-28 0 19 DAY	

PARAMETER		QUANTITY					CONCENTRATION					FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX.	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow	REPORTED	0.3136	1.42	2.6106	MGD	0							
	PERMIT CONDITION		2.08										
Total Nitrogen	REPORTED	445	1064	1521	lbs./day	0		67.3		mg./L.	N/A	continuous	
	PERMIT CONDITION		2200	4300									
Total Phosphorus	REPORTED	70	169	281	lbs./day	0		10.9		mg./L.		2/7days composite	
	PERMIT CONDITION		440	750									
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN MAURICE	W.	GENERAL MANAGER	9 10 1 20 8				
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

WASTE WATER SUMMARY REPORT FOR THE MONTH OF SEPTEMBER

1990

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL PH	
								INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REMVL	INF. MG/L	E M
1	NP	1.2674	595.2	13.2	83	6.9	7.8												
2	NP	0.3860	172.8	4.1	78	6.7	6.9												
3	NP	0.9277	441.6	9.7	78	6.9	7.6												
4	380.417	1.8093	864.0	18.6	84	6.8	7.2	350.0	0.9	14	0.02	99.7%	1365.0	76.7	1154	1.52	94.4%	57.7	1
5	378.857	2.0789	1056.0	22.7	87	6.8	7.1												
6	381.523	2.2858	1113.6	23.3	89	7.1	7.4												
7	379.486	2.6106	1248.0	26.7	90	7.4	7.8	86.0	1.2	27	0.04	98.6%	640.0	66.0	1433	1.89	89.7%	30.0	
8	NP	1.2804	624.0	14.2	90	7.0	8.2												
9	NP	0.3136	153.6	4.1	78	6.8	7.0												
10	NP	0.9115	441.6	10.1	85	6.7	6.8												
11	366.210	1.9485	940.8	20.3	87	6.6	6.9	620.0	2.7	44	0.06	99.6%	1035.0	91.5	1483	2.02	91.2%	32.0	13
12	365.258	2.1218	1075.2	22.3	86	6.7	6.9												
13	366.849	1.9152	921.6	19.8	87	6.6	7.0												
14	184.644	1.8645	883.2	19.2	88	6.7	7.1	150.0	0.7	11	0.03	99.5%	710.0	74.0	1147	3.11	89.6%	41.2	14
15	NP	1.1584	576.0	13.2	89	7.0	7.7												
16	NP	0.3232	163.2	3.6	83	6.9	7.2												
17	NP	0.3402	172.8	3.4	83	6.8	7.6												
18	181.988	1.6509	787.2	16.8	88	6.9	7.2	591.3	37.6	516	1.42	93.6%	865.0	98.0	1345	3.70	88.7%	43.6	10
19	367.078	1.9752	931.2	19.8	87	7.0	7.2												
20	361.020	1.9195	912.0	19.2	87	6.9	7.3												
21	357.156	1.6275	768.0	16.2	89	7.2	7.4	432.9	25.2	341	0.48	94.2%	1070.0	124.0	1678	2.35	88.4%	22.1	5
22	NP	1.0370	480.0	10.5	90	7.2	7.4												
23	NP	1.4670	672.0	15.2	73	7.3													
24	NP	0.9225	403.2	8.9	81	7.0	7.3												
25	375.913	1.7786	844.8	18.2	86	6.6	7.0	118.1	13.9	206	0.27	88.2%	690.0	45.3	670	0.89	93.4%	34.3	8
26	370.574	1.8466	921.6	19.8	88	6.7	6.9												
27	385.594	1.8083	912.0	19.4	87	6.8	7.0												
28	381.427	1.8268	921.6	19.8	90	6.9	7.0	443.0	11.3	172	0.23	97.4%	1410.0	88.5	1344	1.76	93.7%	71.8	9
29	NP	0.8062	384.0	8.5	83	6.8	7.3												
30	NP	0.4200	192.0	4.1	78	6.9	7.2												
TOT.	5583.994	42.6291	20572.8	444.9						1329	2.54				10255	17.24			
AVG	349.000		685.8	14.8	85	6.6	8.2	348.9	11.7	166	0.32		973.1	83.0	1282	2.15		41.6	10

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-90073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing notations. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "— hr. composite") as applicable. If frequency was continuous, enter "N/A".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

REPORTING PERIOD: FROM

(117-101) 001 DIS	(117-101) 2091 SIC
(120-21) 9 0 YEAR	(122-22) 1 00 1 MO DAY

(117-101) 14° 16' 37" LATITUDE	(117-101) 170° 41' 10" LONGITUDE
(120-27) 9 0 YEAR	(120-28) 1 0 31 MO DAY

PARAMETER		(3 card only) QUANTITY					NO. EX	(4 card only) CONCENTRATION					NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM		AVERAGE	MAXIMUM	UNITS					
pH	REPORTED	6.6	7.1	7.8	std. units	0									
	PERMIT CONDITION	6.5		8.6											
Temperature	REPORTED	73	85	90	F	0									
	PERMIT CONDITION			90°											
Total Suspended Solids	REPORTED	429	829	1383	lbs./ Day	0		53.0							
	PERMIT CONDITION		3,300	8,300											
Total Suspended Solids	REPORTED	0.56	1.1	1.84	1,000lbs seafood	0									
	PERMIT CONDITION		3.3	8.3											
Oil and Grease	REPORTED	33	208	594	lbs./ Day	0		13.2							
	PERMIT CONDITION		840	2,100											
Oil and Grease	REPORTED	0.04	0.28	0.79	1,000lbs seafood	0									
	PERMIT CONDITION		0.84	2.1											
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER			DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.					SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			
CALLAGHAN MAURICE W.		GENERAL MANAGER			9 0 1 2 0 8										
LAST FIRST MI		TITLE			YEAR MO DAY										

ORIGINAL

PAGE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 156-00673

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
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5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

(15-5) ST	(16-10) AS-0000019 PERMIT NUMBER	(17-10) DIS 001	(18-10) MC 2091	(19-10) 14° 16' 37" LATITUDE	(20-10) 170° 41' 10" LONGITUDE
REPORTING PERIOD: FROM		(21-21) (22-21) (23-21) 91 01 10 YEAR MO DAY	TO	(24-21) (25-21) (26-21) 91 01 11 YEAR MO DAY	

PARAMETER		(3 card only) QUANTITY				UNITS	NO. EX	(4 card only) CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.1851	1.5719	2.65		MGD	0								
	PERMIT CONDITION		2.08												
Total Nitrogen	REPORTED	760	1226	1862		lbs./day	0		79.1						
	PERMIT CONDITION		2200	4300											
Total Phosphorus	REPORTED	58	145	243		lbs./day	0		9.2						
	PERMIT CONDITION		440	750											
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN	MAURICE W.	GENERAL MANAGER	91 01 12	01 8			
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

WASTE WATER SUMMARY REPORT FOR THE MONTH OF OCTOBER

1990

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL P MG/L
						LO	HI	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	
1	NP	0.8094	384.0	8.1	84	6.7	7.1											
2	379.383	1.7329	912.0	19.4	88	6.9	7.2	410.6	5.4	78	0.10	98.7%	660.0	44.0	634	0.84	93.3%	19.6
3	380.936	2.1322	1056.0	22.7	88	6.9	7.2											
4	380.003	1.8975	931.2	19.8	87	6.9	7.1											
5	359.415	1.9717	1008.0	21.7	90	6.9	7.0	264.4	12.9	212	0.29	95.1%	690.0	60.7	995	1.38	91.2%	32.3
6	NP	0.9635	432.0	9.5	90	6.8	7.0											
7	NP	0.1851	76.8	2.0	87	6.6	6.8											
8	NP	0.9613	432.0	9.5	87	6.7	6.9											
9	404.625	1.7156	902.4	19.2	88	6.6	7.1	45.3	2.3	33	0.04	94.9%	910.0	58.5	835	1.03	93.6%	30.6
10	375.676	2.0497	1065.6	22.7	90	6.8	7.2											
11	390.435	2.1534	1104.0	23.5	89	6.9	7.1											
12	381.311	1.7948	921.6	19.8	90	7.1	7.3	517.3	27.3	407	0.53	94.7%	1180.0	53.5	799	1.05	95.5%	26.1
13	NP	1.0794	547.2	12.2	89	6.8	7.8											
14	NP	0.2889	134.4	3.2	82	6.6	6.8											
15	NP	0.7155	345.6	8.1	84	6.6	7.2											
16	NP	0.8989	432.0	9.7	84	7.1	7.6											
17	377.408	1.9331	998.4	21.3	90	7.1	7.4	359.8	19.3	310	0.41	94.6%	765.0	54.0	868	1.15	92.9%	47.1
18	375.257	2.3194	1056.0	22.5	89	7.0	7.3											
19	375.145	1.9797	1017.6	22.3	90	7.0	7.3	101.6	36.1	594	0.79	64.5%	810.0	84.0	1383	1.84	89.6%	40.9
20	NP	1.0584	480.0	11.0	90	7.4	7.6											
21	NP	0.8334	384.0	8.5	86	7.2	7.6											
22	379.482	1.9445	1008.0	21.9	89	7.1	7.4	82.0	4.1	66	0.09	95.0%	475.0	26.5	429	0.56	94.4%	44.8
23	375.225	2.4672	1075.2	23.3	87	7.1	7.3											
24	376.040	2.6500	1113.6	24.0	90	7.1	7.4											
25	374.880	2.2449	1152.0	24.3	88	7.1	7.6											
26	373.344	1.8593	960.0	21.1	90	6.9	7.6	145.4	7.9	122	0.16	94.6%	680.0	45.0	696	0.93	93.4%	27.5
27	NP	0.7093	364.8	8.5	88	6.8	7.0											
28	NP	0.9356	422.6	9.7	86	6.8	7.1											
29	385.649	1.9467	1036.8	22.7	88	7.0	7.1	37.2	3.2	52	0.07	91.4%	280.0	51.0	826	1.07	81.8%	34.1
30	384.772	2.3335	1104.0	23.9	89	7.1	7.2											
31	408.619	2.1649	1036.8	22.7	87	7.1	7.4											
TOT.	7237.605	48.7297	23894.6	518.8						1874	2.49				7463	9.86		
AVG		1.5719	770.8	16.7	88			218.2	13.2	208	0.28	26.6%	716.7	53.0	829	1.10	26.6%	33.7

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyses that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT.".
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-10 ST	10-10 AS-0000019 PERMIT NUMBER	117-10 001 DIS	2091 MC	14° 16'37" LATITUDE	170° 41'10" LONGITUDE
REPORTING PERIOD: FROM		120-21 9 10 YEAR	122-23 11 MO	124-25 0 11 DAY	TO
		120-27 9 10 YEAR	122-29 11 MO	124-31 13 10 DAY	

PARAMETER		QUANTITY				UNITS	NO. EX	CONCENTRATION				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM						
pH	REPORTED	6.5	7.2	7.8		std.	0									
	PERMIT CONDITION	6.5		8.6		units									continuous	
Temperature	REPORTED	80	83	90		F	0									
	PERMIT CONDITION			90°											continuous	
Total Suspended Solids	REPORTED	612	982	1378		lbs./Day	0		60.6							
	PERMIT CONDITION		3,300	8,300											2/7days composite	
Total Suspended Solids	REPORTED	0.80	1.25	1.78		lbs./1,000lbs seafood	0									
	PERMIT CONDITION		3.3	8.3											2/7days calculated	
Oil and Grease	REPORTED	100	195	361		lbs./Day	0		12.0							
	PERMIT CONDITION		840	2,100											2/7days composite	
Oil and Grease	REPORTED	0.13	0.25	0.44		lbs./1,000lbs seafood	0									
	PERMIT CONDITION		0.84	2.1											2/7days calculated	
	REPORTED															
	PERMIT CONDITION															
	REPORTED															
	PERMIT CONDITION															

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER			DATE			I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.			SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		
LAST	FIRST	MI	TITLE			YEAR	MO	DAY						
CALLAGHAN	MAURICE	W.	GENERAL MANAGER			9	10	11 12 01 8						

ORIGINAL

PAGE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT**

Form Approved
OMB NO. 150-R0073

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT." If frequency was continuous, enter "NA".
5. Specify sample type ("grab" or "int. sample(s)") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

10-6 ST	10-10 AS-0000019 PERMIT NUMBER	117-101 001 DIS	2091 MC	14° 16' 37" 170° 41' 10" LATITUDE LONGITUDE
REPORTING PERIOD: FROM		120-311 120-312 120-313 9 0 1 1 0 1 YEAR MO DAY	TO	120-311 120-312 120-313 9 0 1 1 3 0 YEAR MO DAY

PARAMETER		QUANTITY				UNITS	NO. EX.	CONCENTRATION				UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
Flow	REPORTED	0.3534	1.6757	2.4838		MGD	0								
	PERMIT CONDITION		2.08										N/A	continuous	
Total Nitrogen	REPORTED	563	1119	1925		lbs./day	0		69.3				mg./L.	2/7days	composite
	PERMIT CONDITION		2200	4300											
Total Phosphorus	REPORTED	94	150	248		lbs./day	0		9.2				mg./L.	2/7days	composite
	PERMIT CONDITION		440	750											
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER		DATE		I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
CALLAGHAN MAURICE W.	GENERAL MANAGER	9 10 11 20 18					
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

WASTE WATER SUMMARY REPORT FOR THE MONTH OF NOVEMBER

1990

DATE	PROD TONS	FLOW MGD	ALUM #/DAY	POLY #/DAY	MAX TEMP F	pH LIMIT		OIL & GREASE					TOTAL SUSPENDED SOLIDS					TOTAL INF MG/L
						LO	HI	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	INF. MG/L	EFF. MG/L	TOTAL #/DAY	LBS./ 1000 SF	% REML	
1	399.745	2.2129	1104.0	23.9	89	6.8	7.4											
2	375.084	1.9430	998.4	21.3	89	7.0	7.4	193.9	9.9	160	0.21	94.9%	1520.0	59.0	937	1.25	96.2%	39.0
3	NP	0.6841	307.2	7.1	90	7.0	7.1											
4	NP	1.0858	499.2	11.1	86	6.8	7.1											
5	384.175	2.0129	1056.0	22.7	86	6.8	7.3	228.1	12.0	201	0.26	94.7%	2245.0	61.5	1029	1.34	97.3%	44.0
6	386.317	2.1471	1075.2	22.7	87	7.2	7.4											
7	337.909	2.1351	1094.4	22.3	90	7.3	7.5											
8	390.666	2.3241	1152.0	23.9	90	7.4	7.6											
9	383.778	1.9790	1017.6	21.9	90	6.9	7.8	215.1	6.1	100	0.13	97.2%	635.0	37.2	612	0.80	94.1%	46.0
10	NP	0.5538	249.6	5.7	89	6.9	7.0											
11	NP	1.2816	595.2	13.2	84	6.8	7.1											
12	386.935	1.9308	1008.0	21.1	86	6.5	7.3	289.0	11.8	189	0.24	95.9%	632.5	85.8	1378	1.78	86.4%	27.0
13	386.775	2.3886	1132.8	23.9	86	6.8	7.0											
14	386.184	1.9876	1027.2	21.9	88	6.6	7.2											
15	417.125	2.4838	1152.0	25.5	87	6.6	7.0											
16	384.433	2.0551	1056.0	23.3	90	6.7	7.0	284.3	9.9	169	0.22	96.5%	1045.0	68.3	1167	1.52	93.5%	19.8
17	NP	0.9652	480.0	11.1	90	6.9	7.5											
18	NP	0.9769	508.8	11.1	88	7.1	7.8											
19	401.493	1.9438	1046.4	22.3	90	6.9	7.2	221.4	13.0	210	0.26	94.1%	645.0	83.0	1342	1.67	87.1%	34.8
20	415.431	2.1180	1084.8	23.3	89	7.1	7.3											
21	409.824	1.9034	1027.2	22.3	90	7.2	7.3	87.2	22.8	361	0.44	73.8%	663.3	49.6	785	0.96	92.5%	18.9
22	NP	0.7659	355.2	8.1	89	7.3	7.4											
23	NP	0.3534	163.2	4.1	87	7.4	7.5											
24	NP	0.4957	192.0	4.9	86	7.5	7.6											
25	NP	1.1500	528.0	12.2	87	7.5	7.4											
26	400.168	1.7788	940.8	20.3	88	7.4	7.3	72.7	9.4	139	0.17	87.0%	472.5	56.7	933	1.05	88.0%	26.6
27	411.165	2.1988	1056.0	22.9	87	7.2	7.4											
28	411.012	2.1383	1075.2	23.3	89	7.1	7.2											
29	410.018	2.2711	1094.4	23.5	89	7.2	7.3											
30	402.401	2.0015	1075.2	22.7	89	7.1	7.3	175.2	13.3	221	0.27	90.4%	1124.2	45.2	752	0.92	96.0%	39.4
31																		
TOT.	7935.638	50.2710	25152.0	543.6						1753	2.22				8840	11.28		
AVG		1.6757	838.4	18.1	88			196.3	12.0	195	0.25	26.7%	998.1	60.6	982	1.25	26.8%	33.0

Cynthia Young
EPA
26 DEC 1990

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231

FAX NO: (684) 644-2440

17 December 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Subject: Toxic Substance Monitoring Program
NPDES Permit No. AS0000019

StarKist Samoa hereby submits the following monitoring data as required under the Toxic Substance Monitoring Program of the above referenced NPDES Permit:

	<u>Supply Water</u> <u>(Thaw water)</u>	<u>Effluent</u>
Cadmium	0.059	0.024
Chromium	0.12	0.04
Lead	0.17	0.10
Mercury	0.042	0.002
Zinc	0.27	0.32

All concentrations above are reported as milligrams per liter. Samples were collected on October 31, 1990 and analyzed by AECOS the week of November 10th.

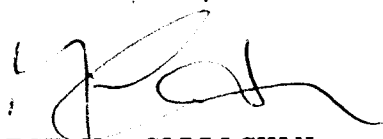
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified

Toxic Substance Monitoring Program
NPDES Permit No. AS0000019
17 December 1990
Page 2

personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Yours truly,

STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

cc: N. Wei
R. Ward

D:\samoa\toxdata2.as



StarKist SAMOA, Inc.

13 NOV 1990

Copy to Mikehee



P.O. BOX 368

PAGO PAGO

AMERICAN SAMOA 96799

7 November 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Monitoring Results for the Month of October 1990 under
the U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of October 1990 as required under US EPA's Administrative Order issued on June 18, 1990.

All the daily maximum and monthly average limitations for total phosphorus and total nitrogen were met except for October 12 when the daily maximum for total nitrogen was exceeded by 8 percent.]

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

Maurice Callaghan
General Manager

Attachment

ADMINISTRATIVE ORDER COMPLIANCE REPORT
October 1990

Date October	Flow mgd	Influent mg/l	Effluent mg/l	Total Phosphorus	
				Influent #/day	Effluent #/day
2	1.7329	19.6	8.8	282	127
5	1.9717	32.3	12.1	530	198
9	1.7156	30.6	4.1	437	58
12	1.7948	26.1	4.8	390	72
17	1.9331	47.1	11.4	757	183
19	1.9797	40.9	4.8	673	79
22	1.9445	44.8	15.0	724	243
26	1.8593	27.5	10.0	425	155
29	1.9467	34.1	11.6	552	188
<hr/>					
Average	1.8754	33.7	9.2	530	145
Maximum	1.9797	47.1	15.0	757	243

Date October	Flow mgd	Influent mg/l	Effluent mg/l	Total Nitrogen	
				Influent #/day	Effluent #/day
2	1.7329	162.5	116.3	2342	1676
5	1.9717	126.1	77.2	2068	1265
9	1.7156	151.4	53.2	2161	760
12	1.7948	176.6	124.7	2635	1862
17	1.9331	151.3	72.9	2432	1171
19	1.9797	103.9	64.6	1710	1063
22	1.9445	110.8	58.0	1792	938
26	1.8593	99.5	65.2	1539	1008
29	1.9467	128.9	79.8	2086	1292
<hr/>					
Average	1.8754	134.6	79.1	2085	1226
Maximum	1.9797	176.6	124.7	2635	1862

Date October	Total Suspended Solids (mg/l)		Press Liquor	Cooker Juice
	Influent mg/l	Effluent mg/l		
2	660.0	44.0	142,300	6,700
5	690.0	60.7	132,800	3,650
9	910.0	58.5	143,300	2,100
12	1180.0	53.5	160,300	3,450
17	765.0	54.0	151,800	4,450
19	810.0	84.0	160,400	7,200
22	475.0	26.5	173,000	5,950
26	680.0	45.0	139,400	2,000
29	280.0	51.0	126,200	4,800
Average	716.7	53.0	147,722	4,478
Maximum	1180.0	84.0	173,000	7,200

Date October	Total Phosphorus		Total Nitrogen	
	Press Liquor	Cooker Juice	Press Liquor	Cooker Juice
2	645.9	353.7	17089.0	4792.7
5	698.9	491.4	12459.4	8190.3
9	836.3	525.4	12829.6	9352.5
12	666.9	497.7	13841.2	6177.3
17	673.7	399.6	16081.3	6387.8
19	766.5	393.0	13197.4	7816.4
22	682.2	479.8	14012.8	5158.1
26	662.1	532.2	16423.1	7005.8
29	668.1	488.0	17980.2	5882.5
Average	700.1	462.3	14879.3	6751.5
Maximum	836.3	532.2	17980.2	9352.5

		Oil and Grease			
Date		Influent	Effluent	Press	Cooker
October	Samples	mg/l	mg/l	Liquor	Juice
2	8:00 am	62.7	3.1	62,648	4,376
	10:00 am	251.8	9.7	84,680	8,333
	noon	290.1	35.1	70,664	3,749
	2:00 pm	206.7	3.8	62,080	2,389
	Average	202.8	12.9	70,018	4,712
5	8:00 am	639.2	19.9	40,039	7,484
	10:00 am	550.5	13.5	111,406	6,726
	noon	478.8	4.1	62,436	1,404
	2:00 pm	426.8	6.6	89,939	923
	Average	523.8	11.0	75,955	4,134
9	8:00 am	688.7	9.1	111,800	3,290
	10:00 am	109.6	12.2	105,989	2,960
	noon	102.8	4.8	22,331	5,026
	2:00 pm	144.6	4.9	64,356	2,338
	Average	261.4	7.7	76,119	3,403
12	8:00 am	394.7	30.8	59,040	2,380
	10:00 am	382.0	10.3	74,633	2,299
	noon	572.5	6.6	106,073	1,510
	2:00 pm	495.2	18.8	87,773	1,830
	Average	461.1	16.6	81,880	2,005
17	8:00 am	93.7	28.5	102,099	1,573
	10:00 am	111.7	7.6	77,765	1,698
	noon	713.2	26.2	87,770	3,390
	2:00 pm	249.0	51.0	46,630	1,323
	Average	291.9	28.3	78,566	1,996
19	8:00 am	41.2	17.9	94,788	1,360
	10:00 am	54.1	18.7	82,454	1,433
	noon	70.1	17.5	99,529	1,779
	2:00 pm	77.0	32.2	86,149	929
	Average	60.6	21.6	90,730	1,375
22	8:00 am	35.1	25.0	46,386	1,996
	10:00 am	44.9	15.1	73,906	969
	noon	80.5	3.9	50,523	4,334
	2:00 pm	239.9	15.5	112,574	1,208
	Average	100.1	14.9	70,847	2,127
26	8:00 am	302.7	21.6	84,634	2,173
	10:00 am	141.2	14.6	87,044	3,494
	noon	151.3	14.4	97,944	3,679
	2:00 pm	161.6	6.4	107,503	4,354
	Average	189.2	14.3	94,281	3,425
29	8:00 am	50.9	33.3	102,573	2,309
	10:00 am	45.9	25.3	91,665	12,683
	noon	102.6	23.8	54,136	1,506
	2:00 pm	62.0	26.9	109,719	1,886
	Average	65.4	27.3	89,523	4,596
	Daily Max	523.8	28.3	94,281	4,712
	Month Avg	239.6	17.2	80,880	3,086

Volumes in Gallons			
Date	Press	Cooker	Total Hi
October	Liquor	Juice	Strg waste
1			
2	6,400	58,300	64,700
3	10,300	50,500	60,800
4	11,400	72,200	83,600
5	13,800	63,100	76,900
6	3,100	24,400	27,500
7			
8			
9	9,800	78,600	88,400
10	14,400	60,200	74,600
11	14,300	64,200	78,500
12		50,900	50,900
13	15,900	27,300	43,200
14			
15			
16	7,000	6,700	13,700
17	13,640	36,700	50,340
18	14,880	48,100	62,980
19	14,880	45,000	59,880
20	5,580	9,800	15,380
21			
22	14,200	31,300	45,500
23	13,600	55,800	69,400
24	15,800	29,200	45,000
25	11,900	61,700	73,600
26	18,400	50,900	69,300
27	800	4,300	5,100
28			
29	12,000	45,800	57,800
30	15,800	51,700	67,500
31	17,200	55,200	72,400

Total	275,080	1,081,900	1,356,980
Average	11,960	45,079	56,541
Maximum	18,400	78,600	88,400

There were periodic malfunctioning
of the flow meters during the first week.

Additional Sampling results

Date	Samples	Oil and Grease		Press Liquor	Cooker Juice
		Influent mg/l	Effluent mg/l		
October					
2	8:00 am	25.0	1.3	65,000	940
	10:00 am	274.0	1.3	83,000	2,100
	noon	188.0	0.6	66,000	630
	2:00 pm	149.0	1.7	75,000	250
	Average	159.0	1.2	72,250	980

Additional analyses performed by AECOS Lab.

DEC 1990
Copy to P. Cotter, Mike Lee,
N. Lovelace



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

November 26, 1990

OPINAP (E-4)
U. S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

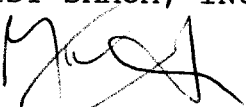
This is to advise you that pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and phosphorus permitted maximum concentrations were exceeded during the month of September in the press liquor.

The oil and grease concentration of the press liquor was 120,000 mg/l. The permitted concentration is 62,150 mg/l. The total phosphorus concentration was 2,242 mg/l. The permitted concentrations is 1,990 mg/l.

All other permitted concentrations were met.

Sincerely,

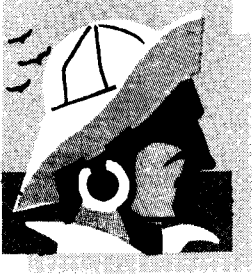
STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: R. Higgins
K. Miller
R. Ward
N. Wei

Rec'd 11/23/90
Copy to Pat Cotter



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

November 12, 1990

OPINAP (E-4)
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that, pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the following permitted maximum concentrations were exceeded during the month of August:

1. The total nitrogen concentration of the DAF sludge was 21,000 mg/l. The permitted concentration is 18,100 mg/l.
2. The total phosphorus concentration of the press liquor was 2,030 mg/l. The permitted concentration is 1,990 mg/l.

All other permitted concentrations were met. The average daily volume of wastes (DAF sludge, press liquor, and cooker juice) disposed of at the designated site was 74,500 gallons, far below the permitted daily volume of 200,000 gallons.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: R. A. Ward/N. Wei/H. Tisalona/K. Miller

Star-Kist Samoa

9/90

TOTAL PHOSPHORUS

Date	I N F L U E N T			(Inf. Load x 0.65)	E F F L U E N T			% Removal	MONTHLY MAX. IEL VIOLATION
	Flow	Conc.	Load		Flow	Conc.	Load		
9/4	1.8093	57.7	871	566	1.8093	18.7	282	68	NO
9/7	2.6106	30.0	653	425	2.6106	6.5	142	78	NO
9/11	1.9485	32.0	520	338	1.9485	13.0	211	59	NO
9/14	1.8645	41.2	641	416	1.8645	14.9	232	64	NO
9/18	1.6509	43.6	600	390	1.6509	10.8	149	75	NO
9/21	1.6275	22.1	300	195	1.6275	5.2	71	76	NO
9/25	1.7786	34.3	509	331	1.7786	8.5	126	75	NO
9/28	1.8268	71.8	1094	711	1.8268	9.5	145	87	NO
Monthly Average			648	421			170	73	
MONTHLY AVERAGE IEL			170						
VIOLATION:			NO						
Daily Maximum	1.9485	71.8	1094	711	1.9850	18.7	282	74	
DAILY MAXIMUM IEL			320						
DAILY MAXIMUM VIOLATIONS:			0						

Star-Kist Samoa

9/90

TOTAL NITROGEN

Date	I N F L U E N T Flow	Conc.	Load	(Inf. Load x 0.65)	E F F L U E N T Flow	Conc.	Load	% Removal	MONTHLY MAX. IEL VIOLATION
9/4	1.8093	134.5	2030	1319	1.8093	60.3	910	55	NO
9/7	2.6106	109.8	2391	1554	2.6106	70.1	1526	36	NO
9/11	1.9485	165.3	2686	1746	1.9485	81.3	1321	51	NO
9/14	1.8645	204.5	3180	2067	1.8645	70.0	1088	66	NO
9/18	1.6509	86.9	1196	778	1.6509	32.4	446	63	NO
9/21	1.6275	221.3	3004	1952	1.6275	85.4	1159	61	NO
9/25	1.7786	112.1	1663	1081	1.7786	72.9	1081	35	NO
9/28	1.8268	173.7	2646	1720	1.8268	68.9	1050	60	NO

Monthly Average	1.8896	151.0	2349	1527	1.8896	67.7	1073	53	
--------------------	--------	-------	------	------	--------	------	------	----	--

MONTHLY AVERAGE IEL 1785

VIOLATION: NO

Daily Maximum	2.6106	221.3	3180	2067	2.6106	85.4	1526	52	
------------------	--------	-------	------	------	--------	------	------	----	--

DAILY MAXIMUM IEL 2745

DAILY MAXIMUM VIOLATIONS: 0

18 OCT 1990

GP *Cyng to Mike*



Star-Kist SAMOA, Inc.



P.O. Box 368 • PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

October 8, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Monitoring Results for the Month of September 1990 under the U.S. EPA's Administrative Order to StarKist Samoa

Attached are StarKist Samoa's monitoring results for the month of September 1990 as required under US EPA's Administrative Order issued on June 18, 1990. Due to the intensive nature of the sampling requirements, many of the samples had to be sent to AECOS laboratory in Hawaii for analysis. This is the reason why StarKist Samoa was not able to submit all of its analytical results on or before the 7th day of the month following.

All the daily maximum and monthly average limitations and removal efficiency requirements for nitrogen and phosphorus were met. StarKist Samoa expects to continue to meet all daily maximum and monthly average limitations.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

Maurice Callaghan
General Manager

Attachment

ADMINISTRATIVE ORDER COMPLIANCE REPORT

September 1990

Total Phosphorus

Date Sept	Flow mgd	Inf. mg/l	Eff. mg/l	Inf. #/day	Eff. #/day	Percent Removal
4	1.8093	57.7	18.7	868	281	68%
7	2.6106	30.0	6.5	651	141	78%
11	1.9485	32.0	13.0	519	211	59%
14	1.8645	41.2	14.9	639	231	64%
18	1.6509	43.6	10.8	599	148	75%
21	1.6275	22.1	5.2	299	70	76%
25	1.7786	34.3	8.5	507	125	75%
28	1.8268	71.8	9.5	1091	145	87%
Average		41.6	10.9	646	169	

Monthly Av. IEI =
170
very close
difference w/
effluent flow rate?

Total Nitrogen

Date Sept	Flow mgd	Inf. mg/l	Eff. mg/l	Inf. #/day	Eff. #/day	Percent Removal
4	1.8093	134.5	60.3	2024	907	55%
7	2.6106	109.8	70.1	2383	1521	36%
11	1.9485	165.3	81.3	2678	1317	51%
14	1.8645	204.5	70.0	3171	1086	66%
18	1.6509	86.9	32.4	1193	445	63%
21	1.6275	221.3	85.4	2995	1156	61%
25	1.7786	112.1	72.9	1658	1078	35%
28	1.8268	173.7	68.9	2638	1047	60%
Average		151.0	67.7	2343	1070	

Total Suspended Solids (mg/l)

Date Sept	Inf. mg/l	Eff. mg/l	Press Liquor	Cooker Juice
4	1365.0	76.7	103,500	4,000
7	640.0	66.0	136,300	4,350
11	1035.0	91.5	95,500	5,350
14	710.0	74.0	147,900	2,100
18	865.0	98.0	122,700	1,000
21	1070.0	124.0	167,000	6,500
25	690.0	45.3	135,200	11,550
28	1410.0	88.5	173,900	8,050

Total Phosphorus

Total Nitrogen

Date Sept	Press Liquor	Cooker Juice	Press Liquor	Cooker Juice
4	1608.0	401.6	21343.3	6022.0
7	1524.4	413.2	16081.7	5909.9
11	755.3	321.3	14794.0	2299.9
14	1784.0	606.8	16859.9	2493.4
18	2022.0	238.8	16198.1	1716.4
21	764.5	393.2	15180.6	4509.3
25	616.2	335.1	19778.0	3671.7
28	630.5	318.7	13898.0	2721.3

Concentrations in mg/l

Oil and Grease

Date Sept	Samples	Inf. mg/l	Eff. mg/l	Press Liquor	Cooker Juice
4	8:00 am	780.0	1.3	74,000	4,300
	10:00 am	210.0	0.6	33,000	1,500
	noon	200.0	0.8	61,000	1,800
	2:00 pm	310.0	*	73,000	600
	Average	375.0	0.9	60,250	2,050
7	8:00 am	150.0	1.9	63,000	2,400
	10:00 am	380.0	1.4	66,000	2,000
	noon	280.0	0.9	20,000	2,700
	2:00 pm	250.0	0.7	50,000	1,400
	Average	265.0	1.2	49,750	2,125
11	8:00 am	1300.0	2.8	87,000	2,600
	10:00 am	270.0	2.0	96,000	1,200
	noon	640.0	3.6	98,000	2,100
	2:00 pm	330.0	5.2	120,000	1,300
	Average	635.0	3.4	100,250	1,800
14	8:00 am	570.0	3.0	69,000	2,100
	10:00 am	170.0	0.9	69,000	1,900
	noon	71.0	0.5	80,000	710
	2:00 pm	71.0	2.1	77,000	980
	Average	220.5	1.6	73,750	1,423
18	8:00 am	* 0.0	0.0	30,000	4,200
	10:00 am	0.0	0.0	54,000	1,400
	noon	0.0	0.0	62,000	** 68
	2:00 pm	0.0	0.0	44,000	** 17
	Average	0.0	0.0	47,500	2,800
21	8:00 am	154.2	17.2	85,000	12,000
	10:00 am	749.9	32.0	62,000	940
	noon	585.3	16.0	63,000	710
	2:00 pm	420.9	16.4	94,000	860
	Average	477.6	20.4	73,000	837
25	8:00 am	126.3	12.5	40,821	3,046
	10:00 am	177.2	6.7	54,475	1,493
	noon	120.1	9.3	99,984	2,559
	2:00 pm	205.4	15.2	79,463	11,568
	Average	157.3	10.9	68,686	4,666
28	8:00 am	449.1	13.8	41,570	773
	10:00 am	569.1	2.7	70,016	2,176
	noon	299.1	26.1	77,794	6,409
	2:00 pm	217.0	3.1	57,506	1,640
	Average	383.6	11.4	61,722	2,749

Concentrations for press liquor and cooker juice reported as mg/kg

* Sample bottle broken during transit to Hawaii.

* Outliers as reported by laboratory but not included in averages.

Date Sept	Daily Amount of high strength wastes disposed by Astro (gallons) *
1	
2	
3	
4	73,100
5	67,600
6	68,000
7	69,500
8	73,300
9	
10	
11	
12	61,430
13	57,300
14	70,600
15	67,400
16	
17	
18	74,100
19	68,200
20	67,000
21	71,700
22	
23	
24	10,800
25	
26	75,000
27	55,400
28	72,700
29	
30	

* These figures are provided here because the plant experienced operational problems with the individual magnetic flow meters for the high strength waste streams. These problems have been corrected and individual flow figures will be supplied for October 1990.

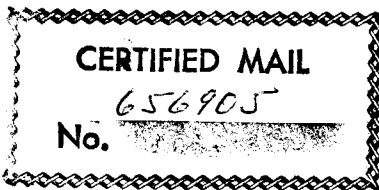
Additional Oil & Grease Data (composite)

Sept	Inf. mg/l	Eff. mg/l
4	350	0.9
7	86	
11	620	2.7
14	150	0.7

StarKist Seafood Company

An Affiliate of H.J. Heinz Company

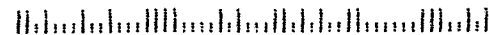
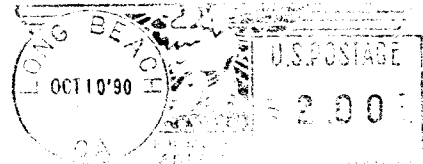
180 East Ocean Boulevard



RETURN RECEIPT REQUESTED

MR. NORMAN LOVELACE
OPINAP (E-4)
US ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 HAWTHORNE STREET
SAN FRANCISCO, CA 94105

RESORT
FIRST CLASS



StarKist Seafood Company

18 OCT 1990

Memorandum

October 16, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Monitoring Results for the Month of September 1990 under
the U.S. EPA's Administrative Order to StarKist Samoa

In StarKist Samoa's monitoring results for the month of September 1990 submitted earlier, the following influent and effluent data for oil and grease for September 18th were inadvertently left out:

September 18, 1990

<u>Time of Sampling</u>	<u>Influent</u>	<u>Effluent</u>
8:00 am	270.0 mg/l	6.3 mg/l
10:00 am	290.0 mg/l	20.0 mg/l
Noon	88.0 mg/l	26.0 mg/l
2:00 pm	280.0 mg/l	51.0 mg/l
Average	232.0 mg/l	25.8 mg/l

Please add these data to your record and accept my apologies for any inconvenience this may have caused you.

Sincerely,



Norman S. Wei
Manager, Environmental Engineering

cc: M. Callaghan

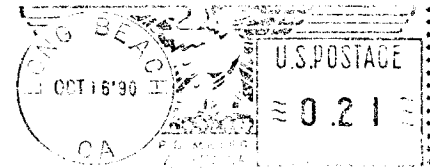
StarKist[®] Seafood Company

An Affiliate of H. J. Heinz Company

180 East Ocean Boulevard
Long Beach, California 90802-4180



REGISTERED
FIRST CLASS



MR. Norman Lovelace
OPINAP - (E-4)
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Copy to Mike

Star-Kist Samoa

August, 1990

TOTAL NITROGEN

Date	I N F L U E N T			(Infl. Load x 0.65)	E F F L U E N T			% Removal	MONTHLY MAX. IEL VIOLATIONS
	Flow	Conc.	Load		Flow	Conc.	Load		
8/8/90	1.6020	401.2	5360	3484	1.6020	102.2	1365	75	NO
8/10/90	2.3050	187.6	3606	2344	2.3050	89.6	1722	52	NO
8/13/90	2.1430	115.1	2057	1337	2.1430	59.0	1054	49	NO
8/17/90	2.1435	173.9	3109	2021	2.1435	87.0	1555	50	NO
8/21/90	1.8504	120.5	1860	1209	1.8504	68.7	1060	43	NO
8/24/90	1.8827	422.9	6640	4316	1.8827	114.2	1793	73	NO
8/28/90	1.9678	123.2	2022	1314	1.9678	67.2	1103	45	NO
8/31/90	1.9514	114.8	1868	1214	1.9514	74.3	1209	35	NO
Monthly Average			3315	<u>2155</u>			<u>1358</u>	53	
MONTHLY AVERAGE IEL			<u>1785</u>						
VIOLATION:			NO						
Monthly Maximum	1.8827	422.9	6640	<u>4316</u>	1.8827	114.2	1793	73	
MONTHLY MAXIMUM IEL			<u>2745</u>						
MONTHLY MAXIMUM VIOLATIONS:			0						

* Note: Flow data submitted by Star-Kist did not specify influent or effluent, therefore flow measurement provided was used to calculated both influent and effluent loading.

Star-Kist Samoa
August, 1990

TOTAL PHOSPHORUS

Date	I N F L U E N T			(Inf. Load x 0.65)	E F F L U E N T			% Removal	MONTHLY MAX. IEL VIOLATION
	Flow	Conc.	Load		Flow	Conc.	Load		
8/8/90	1.6020	63.6	850	552	1.6020	20.1	269	68	NO
8/10/90	2.3050	35.6	684	445	2.3050	6.1	117	83	NO
8/13/90	2.1430	25.7	459	299	2.1430	7.1	127	72	NO
8/17/90	2.1435	46.0	822	535	2.1435	11.3	202	75	NO
8/21/90	1.8504	31.8	491	319	1.8504	11.7	181	63	NO
8/24/90	1.8827	50.2	788	512	1.8827	19.9	312	60	NO
8/28/90	1.9678	23.9	392	255	1.9678	14.0	230	41	NO
8/31/90	1.9514	36.9	601	390	1.9514	6.1	99	83	NO
Monthly Average			636	413			192	68	
MONTHLY AVERAGE IEL			<u>170.00</u>						
VIOLATION:			YES						
Monthly Maximum	1.6020	63.6	850	552 0	1.6020	20.1	269	68	
MONTHLY MAXIMUM IEL			<u>320.00</u>						
MONTHLY MAXIMUM VIOLATIONS:			0.00						

EPA Recd
17 SEP 1990
Copy to Mike



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

August 10, 1990

Mr. Norman Lovelace
OPINAP
U. S. Environmental Protection Agency
Region 9
1235 Mission Street
San Francisco, CA 94103

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: MONITORING RESULTS FOR THE MONTH OF AUGUST 1990 UNDER THE
U. S. EPA'S ADMINISTRATIVE ORDER TO STARKIST SAMOA

StarKist Samoa began high strength waste segregation on August 8th. Prior to this date, the plant was not in operation and there were no high strength wastes to segregate.

Attached are StarKist Samoa's monitoring results for the month of August 1990 as required under US EPA's Administrative Order issued on June 18, 1990. Due to the intensive nature of the sampling requirements, many of the samples had to be sent to AECOS laboratory in Hawaii for analysis. This is the reason why StarKist Samoa was not able to submit all of its analytical results on or before the 7th day of the month following.

All the daily maximum limitations and removal efficiency requirements for nitrogen and phosphorus were met. The average total nitrogen loadings for the 3-week period was below the monthly average limitation of 1,785 lbs/day. The average total phosphorus loading for the same 3-week period exceeded the monthly average limitation of 170 lbs/day by just over 10 percent.

As expected, there were numerous start-up problems with the segregation of high strength wastes. Due to the registration

Page 2
August 10, 1990

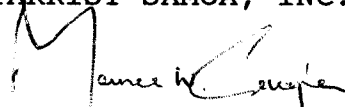
problems with the new sludge disposal vessel, StarKist Samoa did not have any opportunity to test out the internal pumping and delivery system prior to the actual segregation of these wastes. This was the reason why StarKist Samoa attempted to obtain special permission from the agencies to do a true test run of the entire system prior to the Consent Decree deadline of August 1, 1990.

As the waste segregation system becomes a routine operation in the months ahead, StarKist Samoa expects to continue to meet all daily maximum and monthly average limitations. The next report will cover the month of September, 1990.

As General Manager of StarKist Samoa, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

Attachment

cc: K. Miller
R. Fleming/B. Higgins
N. Wei
R. A. Ward

ADMINISTRATIVE ORDER COMPLIANCE REPORT

August 1990

Total Phosphorus

Date	Flow	Inf.	Eff.	Inf.	Eff.	Percent
Aug	mgd	mg/l	mg/l	#/day	#/day	Removal
8	1.6020	63.6	20.1	847	268	68.40%
10	2.3050	35.6	6.1	682	117	82.87%
13	2.1430	25.7	7.1	458	127	72.37%
17	2.1435	46.0	11.3	820	201	75.43%
21	1.8504	31.8	11.7	489	180	63.21%
24	1.8827	50.2	19.9	786	312	60.36%
28	1.9678	23.9	14.0	391	229	41.42%
31	1.9514	36.9	6.1	599	99	83.47%
Average		39.2	12.0	634	192	

Total Nitrogen

Date	Flow	Inf.	Eff.	Inf.	Eff.	Percent
Aug	mgd	mg/l	mg/l	#/day	#/day	Removal
8	1.6020	401.2	102.2	5345	1362	74.53%
10	2.3050	187.6	89.6	3596	1718	52.22%
13	2.1430	115.1	59.0	2050	1052	48.70%
17	2.1435	173.9	87.0	3099	1550	49.98%
21	1.8504	120.5	68.7	1854	1056	43.01%
24	1.8827	422.9	114.2	6621	1788	73.00%
28	1.9678	123.2	67.2	2016	1100	45.43%
31	1.9514	114.8	74.3	1864	1206	35.31%
Average		207.4	82.8	3306	1354	

Total Suspended Solids (mg/l)

Date	Inf.	Eff.	Press	Cooker
Aug	mg/l	mg/l	Liquor	Juice
8	730.0	73.3	18,850	1,000
10	590.0	46.5	7,200	8,500
13	405.0	52.5	11,200	8,500
17	510.0	50.0	11,400	4,800
21	1190.0	135.5	12,000	4,000
24	1065.0	74.0	14,300	5,000
28	705.8	77.5	13,300	4,650
31	925.0	69.5	8,500	5,950

Total Phosphorus

Total Nitrogen

Date	Press	Cooker	Press	Cooker
Aug	Liquor	Juice	Liquor	Juice
8	2264.8	2113.0	11312.4	9660.7
10	2832.2	840.3	13356.2	10080.1
13	2388.6	1097.2	18901.4	2495.5
17	2264.0	548.0	15751.8	3809.6
21	2056.0	980.0	19096.3	5376.2
24	2580.0	712.0	18556.9	6387.1
28	1236.0	279.5	20603.0	7353.1
31	2054.8	971.6	20512.6	6917.7

Concentrations in mg/l

Oil and Grease

Date	Samples	Inf. mu/l	Eff. mu/l	Press Liquor	Cooker Juice
8	8:00 am	210.3	35.8	38569.0	342.0
	10:00 am	186.7	7.1	760.0	585.5
	noon	476.9	35.6	23340.0	457.5
	2:00 pm	246.4	18.0	16442.5	619.0
	Average	280.1	24.1	19777.9	501.0
10	8:00 am	330.0	12.2	21081.5	837.5
	10:00 am	466.4	29.5	23286.0	924.0
	noon	170.0	64.7	26000.0	330.0
	2:00 pm	100.0	1.4	44000.0	110.0
	Average	266.6	27.0	28591.9	550.4
13	8:00 am	39.0	4.4	27000.0	2900.0
	10:00 am	86.0	0.6	29000.0	800.0
	noon	140.0	5.2	43000.0	720.0
	2:00 pm	230.0	2.6	49000.0	20.0
	Average	123.8	3.2	37000.0	1110.0
17	8:00 am	92.0	1.2	54000.0	1700.0
	10:00 am	54.0	0.5	32000.0	7500.0
	noon	42.0	0.5	120000.0	800.0
	2:00 pm	19.0	0.8	30000.0	390.0
	Average	51.8	0.8	59000.0	2597.5
21	8:00 am	280.0	6.6	52000.0	1100.0
	10:00 am	130.0	9.0	60000.0	140.0
	noon	370.0	8.8	49000.0	3000.0
	2:00 pm	930.0	10.5	49000.0	980.0
	Average	427.5	8.7	52500.0	1305.0
24	8:00 am	1200.0	5.6	*	*
	10:00 am	320.0	2.7	170000.0	1400.0
	noon	230.0	3.4	62000.0	620.0
	2:00 pm	430.0	2.3	53000.0	1300.0
	Average	545.0	3.5	95000.0	1106.7
28	8:00 am	480.0	20.0	39000.0	3300.0
	10:00 am	180.0	17.0	61000.0	1500.0
	noon	260.0	17.0	43000.0	1900.0
	2:00 pm	280.0	16.0	84000.0	1600.0
	Average	300.0	17.5	56750.0	2075.0
31	8:00 am	610.0	13.0	45000.0	1200.0
	10:00 am	1100.0	4.2	39000.0	50000.0
	noon	960.0	3.1	45000.0	56.0
	2:00 pm	630.0	5.2	70000.0	250.0
	Average	825.0	6.4	49750.0	12876.5

*SAMPLE BOTTLES ARRIVED AT HONOLULU LAB BROKEN.

516.66H

Daily flow of high strength wastes (gallons)

Date Aug		Press Liquor	Cooker Juice
8		19,200	28,300
9		21,400	39,400
10		74,200	37,800
11		53,800	11,200
12	No production		
13		14,900	85,200
14		7,400	45,400
15	Feed line was blocked - no flow		
16		13,700	44,800
17		12,400	59,000
18		5,000	5,200
19	No production		
20			7,100
21		13,800	44,900
22		11,400	56,100
23		65,500	41,600
24		70,700	29,700
25		9,400	9,600
26	No production		
27		pump off	8,900
28		5,200	66,400
29		9,600	52,600
30		10,300	67,300
31		13,500	79,000

WB 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31
 00 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31



Star-Kist Samoa, Inc.

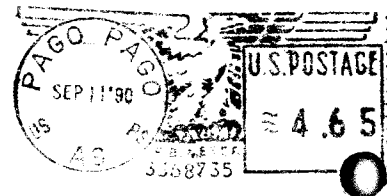
P.O. BOX 368, PAGO PAGO, TUTUILA
AMERICAN SAMOA 96799

R REGISTERED MAIL

R 725 588 937

Mr. Norman Lovelace
OPINAP
U. S. Environmental Protection Agency
Region 9
1235 Mission Street
San Francisco, CA 94103

REGISTERED MAIL



Star-Kist Samoa, Aug 1990

Total Phosphorus

Date	Influent		8.65 x Load In	Flow	Effluent		% Removal
	Conc.	Load			Conc.	Load	
8/8	63.6	850.	553	1.6020	20.1	269	68
8/10	35.6	679 684	448.5	2.3050	6.1	117	83
8/13	25.7	459	298	2.1430	7.1	127	72
8/17	46.0	822	534	2.1435	11.3	202	75
8/21	31.8	491	319	1.8504	11.7	181	63
8/24	50.2	788	512	1.8827	19.9	312	60
8/28	23.9	392	255	1.9678	14.0	230	41
8/31	36.9	601	391	1.9514	6.1	99	83

Average

63.5

41.3 >
IEL 170

→ 192
* Monthly Average Violation
(\$10,000 for 1st month)

Daily Max

850
822

553
534 >
IEL 320

no daily max violations

Star Kist Samoa, Aug. 1990

TKN

Date	Influent		x.65x Load In	IN? EF? Flow	Effluent		% Removal
	Conc.	Load			Conc.	Load	
8/8	401.2	5,360	3,484	1.6020	102.2	1,365	75 75
8/10	187.6	3,606	2,344	2.3050	89.6	1,722	52
8/13	115.1	2,057	1,337	2.1430	59.0	1,054	49
8/17	173.9	3,109	2,021	2.1435	87.0	1,555	50
8/21	120.5	1,860	1,209	1.8504	68.7	1,060	43
8/24	422.9	6,640	4,316	1.8827	114.2	1,793	73
8/28	123.2	2,022	1,314	1.9678	67.2	1,103	45
8/31	114.8	1,868	1,214	1.9514	74.3	1,209	35

Av.

3,315

2,155 >

1,785

1,358

no violation of monthly average

Daily Max

6,640

4,316 >

2,745

no daily max violations

8 NOV 1990



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

2 November 1990

Mr. Norman Lovelace (E-4)
U.S. Environmental Protection Agency
Office of Pacific Island and Native
American Programs
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa

Gentlemen:

Enclosed is a copy of StarKist Samoa's Status Report on the engineering feasibility study as required under the Consent Decree.


We have made significant progress in the study. In fact, we have a team of five consultants on the island at this moment evaluating the feasibility of a marine pipeline and collecting sediment and water quality samples. We fully expect to complete the study and submit the final report to the parties on or before the stipulated date of March 31, 1991.

Based on our consultants' assessment of the different outfall locations, it is apparent that given the extremely stringent water quality standards, StarKist is now faced with the options of either constructing a multi-million dollar pipeline or terminating operations in American Samoa altogether.

We expect that there will be sufficient information in the final report for senior management to make a decision on or before May 31, 1991.

Sincerely,

STARKIST SAMOA, INC.


Maurice W. Callaghan
General Manager
Enclosure

cc: R. A. Ward/N. S. Wei

Engineering Feasibility Study
Status Report as of October 31, 1990

Submitted to :

The Environmental Quality Commission
and
The United States Environmental Protection Agency

by:
StarKist Samoa Inc.

Engineering Feasibility Study

Status Report as of October 15, 1990

The purpose of this status report is to provide a summary of progress and results of the Engineering Feasibility Study (herein after referred to as the Study) required under the Consent Decree between StarKist Samoa, Inc. and the American Samoa Government.

The objective of the Study is to evaluate the feasibility and relative merits of various outfall locations for the discharge of cannery wastewater into Pago Pago Harbor. This progress report covers the time period from the commencement of the work through October 15th, 1990.

The environmental consulting firm of CH₂M Hill has been retained by StarKist Samoa to conduct the Study.

The Study is organized into five major functional tasks and associated subtasks. Progress made under each of these tasks and subtasks is summarized below:

TASK 1. WATER QUALITY MODELING

1.1 Model Evaluation and Review

The model developed by Hydro Resources International for the Waste Load Allocation Study was reviewed and evaluated by CH₂M Hill. The specification of the boundary conditions for the nutrient transport portion of the model were found to be physically unrealistic and may lead to unreliable results under some conditions. The interpolation routine for non-point source loading also appears to be specified in a manner that could lead to unreliable predictions under certain conditions.

The analysis of the model results indicates that there is an inconsistency between results for the present and future cases that must be accounted for before the results are applied as guidance for setting WLAs or a TMDL for Pago Pago Harbor.

The following conclusions about the WLA model study results, approach, and execution were reached by StarKist's consultants:

- [1] Two problems with the model code were discovered. The boundary condition for diffusive transport across the solid boundary of the landward end of the model was incorrectly formulated in the model code. The nonpoint source loading terms were incorrectly transformed from the input to calculation model configurations. The latter problem was

probably not significant to the results. The potential for the boundary condition specification effecting model results is significant.

- [2] The model results have inconsistencies that can be explained based on the manner in which the boundary conditions were specified. The possible impact of these problems on the predictions made about the TMDL and WLAs is not known. The input files used during the modeling were not available, therefore the model could not be run with corrected boundary conditions and nonpoint source inputs.
- [3] The spatial and temporal scales of the model are appropriate for a screening-level model, but the scale of the model is not sufficient to investigate short-term or small spatial responses of water column concentrations to effluent load variations. For example, mixing zone sizing and effects of peak loadings on a daily time scale cannot be addressed by the model.
- [4] The calibration of the model using constant diffusivity and decay rates does not appear supportable from a physical perspective or from an examination of the available data. A different calibration approach would change the model predictions. The affect the calibration approach has not been examined.

Dr. Steve Costa (CH2M HILL) and Charles Chamberlin (HRI) met to [1] discuss the boundary condition problems found with the original HRI model and, [2] discuss the enhancements and changes made to the model and modeling approach by the CH2M HILL project staff. Dr. Chamberlin agreed that there was a flaw in the original model and also agreed that CH2M HILL's approach to the problem was reasonable.

An enhanced version of the original HRI model was developed by CH₂M Hill. The following types of runs have been made with the model (PT121):

- Diagnostic validation runs under a wide variety of input conditions have been made to validate the model operation. The diagnostic test cases included runs with all transport processes inoperable to check the volume/continuity aspects of the model, with only advective fluxes operating to check the hydraulic and advective transport terms, with only diffusion operating to check diffusivity terms, with only decay rates operating, with a variety of input conditions including slug inputs and continuous inputs, and under other specific conditions to test various computational algorithms in the model.

- Calibration runs have been completed. The final calibration scheme selected is to use no decay rate, and different eddy diffusion coefficients in the inner and outer harbor areas. Calibration was done by using the same 1985 base case used by HRI and minimizing the differences between predicted and observed values considering both TN and TP. The result is a constant eddy diffusion coefficient for the inner harbor applied to both nutrients, and a constant eddy diffusion coefficient for the outer harbor applied to both nutrient concentrations. The diffusion coefficient in the outer harbor is about 4.3 times that in the inner harbor.
- Verification runs have been made using the 1986 and 1987 TP concentration data used by HRI for the same purpose. The agreement is satisfactory. The correct value to use for background TP values in the nearshore ocean is questionable. The uncertainties are being investigated. However, this is probably not a critical point.
- A series of runs for different loadings and for discharge locations in different parts of the harbor have been completed for TN and TP are currently being reviewed. A set of runs for simultaneous loadings in two parts of the harbor have been completed. All of the above results are being reviewed.

The enhanced water quality model for Pago Pago Harbor (PT121) has been run for different loadings and for discharge locations in different parts of the harbor have been completed for TN and TP. A set of runs for simultaneous loadings in two parts of the harbor have also been finished for TN and TP.

The preliminary results for TN and TP concentration contours show that the existing water quality standards for TP and TN cannot be met in the inner harbor unless the loadings are drastically reduced. Using the results of these model runs the maximum permissible loadings of TN and TP in the inner and middle harbor that meet the stringent ASG water quality standard were found.

A few additional runs for the outer harbor will be made in order to provide the maximum loadings for the outer harbor location. Using the data for each location, plots of maximum allowable loading to meet standards as a function of outfall location will be generated. This will be done for the hypothetical cases where the standards might be relaxed or made more stringent.

1.2 Field Sampling Program

Field operations in Pago Pago Harbor are scheduled for late October and early November of 1990. During this time a limited number of water quality samples will be collected. A field

sampling protocol has been prepared and will be made part of the final report.

TASK 2. SEDIMENT ANALYSIS

2.1 Nutrient Cycling Analysis

The original intent of the Study was to estimate the potential role of nutrient cycling in the inner harbor water and sediments. Since it is now apparent that an inner harbor outfall was probably not feasible under existing stringent water quality standards even with high strength waste segregation, this task was eliminated.

The present approach is to collect a minimum number of samples to look at the potential role of sediment nutrient recycling. The data collected will be sufficient only for a cursory and qualitative analysis of the potential order of magnitude importance of sediment nutrient release into the water column.

TASK 3. MIXING ZONE DETERMINATION

Model Dilution/Mixing Zone

The preliminary initial dilution modeling has been done in order to provide input in the evaluation of outfall location and diffuser design recommendations. Both UMERGE and UDKHDEN were used in this effort. The results indicate that an initial dilution of over 100:1 can be achieved at any of the proposed locations (assuming an inner harbor outfall would be located deeper than at present). A simple diffuser of 5 4-inch diameter ports spaced 15 feet apart and discharging horizontally appears to give good performance combined with simple design and low maintenance requirements.

The same modeling will be used to determine both the steady-state receiving water concentrations of TN and TP and the size of the mixing zone. The steady-state concentrations provide the receiving water characteristics, the initial dilution model combined with the steady-state concentrations provide the concentrations at the end of initial dilution. If the zone of initial dilution is not the same as the mixing zone, then some additional analysis of farfield dilution is required. This will be done by either using the EPA CDIFF model combined with M&E Pacific dye patch dispersion results, by using the PT121 model with a smaller grid spacing, or by using another appropriate analysis technique. The actual technique used depends on each specific case. The transport model (PT121) results provide a calculation of the volume of the mixing zone but not its specific shape.

The work under this task is closely related to that in Task 1 described above. The work on defining the details of the mixing zone geometries for different loadings and locations is currently

being conducted.

The initial modeling for the mixing zone definition is nearly finished and the next step of evaluating the effects of location and diffuser design is being conducted.

TASK 4. SEASONALITY OF OCEAN CURRENTS

Based on analysis of existing data, oceanographers at CH2M Hill have determined that:

- Current variability is essentially wind driven both in the nearshore ocean and in the outer harbor.
- Wind patterns are seasonal and only a limited number of cases need to be considered.
- The primary impact of wind driven variability on the evaluation of outfall location alternatives is on diffuser design as it affects plume trapping level.

The nature of the wind driven current variability is being considered in the evaluation of outfall locations. This factor favors outfalls in the middle and outer harbors about equally.

TASK 5. ENGINEERING EVALUATION

Geological/Geophysical Survey

It has been determined that there are probably no reliable existing charts or smooth sheets of the bathymetric features of Pago Pago Harbor. The published NOS nautical chart can only provide a guide to bathymetric features. It is not usable for design or engineering feasibility purposes. A team of five consultants from CH2M Hill are presently in American Samoa conducting bathymetry and side-scan sonar studies to determine the feasibility of laying a marine pipeline. These consultants are also collecting sediment and water quality samples from the harbor. Results from these field studies will be provided in the final report.

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An intermediate cost scenario for the land route has been developed. A preliminary cost comparison for different size pipes (6- to 18-inch diameter) has been completed. Refinement of the previous land route cost estimates are being done for additional comparison. More detailed cost/schedule information will be developed as necessary to evaluate outfall locations. These costs are undergoing review and will be incorporated in the final report.

Environmental Permitting

A meeting was held with the US Army Corps of Engineers' Pacific Ocean Division in Hawaii in July 1990. Based on the meeting, it was determined that a construction permit would be required from the Army Corps of Engineers to install a marine pipeline. The cannery would need to submit a brief environmental assessment report to the Corps outlining the type of environmental impacts anticipated by the construction activities. If there are no substantial environmental impact, the Corps can then issue a permit under its "Nationwide Permit Program" within 30 to 60 days. If there are significant environmental impact, then the Corps would require the cannery to apply for an individual construction permit which would require notice of hearings and review by other government agencies. This process would be more uncertain and take much longer to complete.

It was pointed out by the Corps' representative that if private citizen groups were to object to the pipeline for whatever reasons, public hearings would most likely have to be held and this process could drag on for months. Such a possibility would exist if certain environmental group were to object to the discharge of cannery wastes in a relatively pristine area (i.e. outer harbor).

In terms of local permits in American Samoa, a preliminary list of required permits has been supplied by ASG staff. CH2M Hill consultant also met with environmental planners at the Coastal Management Office to discuss permit requirements. The consultants will supply the Coastal Management Office with preliminary plans for the various pipeline options to enable the Office to identify specific permit requirements. This list of contacts will be used in the event that a pipeline is selected as the disposal alternative.

Conclusions

Significant progress is being made in the Study as indicated in this status report. The final report for the Study will be completed on or before the Consent Decree deadline of March 31, 1991. It is expected that the final report will contain sufficient information on the various disposal alternatives for StarKist management to select, by May 31, 1991, among the various available options which include termination of operation.

Copy to Phil Woods

StarKist Samoa,

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231

FAX NO: (684) 644-2440

2 November 1990

Mr. Norman Lovelace (E-4)
U.S. Environmental Protection Agency
Office of Pacific Island and Native
American Programs
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa

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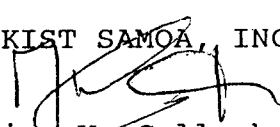
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Sincerely,

STARKIST SAMOA, INC.


Maurice W. Callaghan
General Manager
Enclosure

cc: R. A. Ward/N. S. Wei

Engineering Feasibility Study
Status Report as of October 31, 1990

Submitted to :

The Environmental Quality Commission
and
The United States Environmental Protection Agency

by:

StarKist Samoa Inc.

Engineering Feasibility Study

Status Report as of October 15, 1990

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depth?

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Starkist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231

FAX NO: (684) 644-2440

October 22, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Lovelace:

We are in receipt of your letter of October 19, 1990 which outlines your agency's concerns regarding the monitoring requirements under the Administrative Order. We too are pleased that the high strength waste segregation has resulted in significant reduction in nutrient loadings to the harbor.

In future reports, we will identify the daily maximum values and calculate the monthly averages for the appropriate parameters. Please note that the daily flows reported were those of the effluent. The effluent flow at the plant is the same as the influent except for the addition of a small amount of coagulant and the removal of sludge.

The nitrogen values contained in all our Administrative Order reports were for Total Nitrogen (Kjeldahl plus nitrite/nitrate). We started analyzing for TN in August of 1990 in order to conform to the Administrative Order's requirements. Our latest Discharge Monitoring Report for the month of August 1990, submitted to your agency on September 26, indicates that the analyses were for Total Nitrogen.

We are aware of the Consent Decree's requirement for an interim written status report on the engineering feasibility study to be submitted within 3 months upon the Court's acceptance of the Decree. This status report will be submitted to the US EPA, the American Samoa Government and the High Court of American Samoa on or before November 2, 1990.

Mr. Norman Lovelace
October 22, 1990
Page 2

On the matter of Toxic Substance Monitoring Program, a report was submitted to your agency on March 30, 1990. An extra copy of this report is enclosed for your file. The next sampling event is scheduled to take place during the week of October 29, 1990 and the results will be forwarded to your agency and ASEQC as soon as they become available. Earlier monitoring had not been carried out because of the evidentiary hearing appeal process.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/t1

cc: P. Faiiai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, Office of the Attorney General, ASG
J. Ciko
N. Wei
R. A. Ward

Star-Kist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

March 30, 1990

Regional Administrator
Environmental Protection Agency
Region 9, Attn: W-1-1
1235 Mission Street
San Francisco, California 94103

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Pago Pago, American Samoa 96799

Subject: Toxic Substance Monitoring Program
NPDES Permit No. AS0000019

StarKist Samoa hereby submits the following monitoring data as required under the Toxic Substance Monitoring Program of the above referenced NPDES Permit:

	<u>Supply Water</u> <u>(Thaw Water)</u>	<u>Effluent</u>
Cadmium	0.06	0.06
Chromium	0.20	0.12
Lead	0.70	0.40
Mercury	< 0.005	< 0.005
Zinc	0.21	0.43

All concentrations above are reported as milligrams per liter. Samples were collected on January 16, 1990 and analyzed by AECOS the week of February 5th.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on

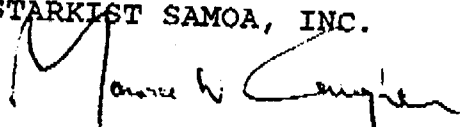


Toxic Substance Monitoring Program
NPDES Permit No. AS0000019
March 30, 1990
Page 2

my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Yours truly,


STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: N. Wei
R. A. Ward

All Entries MUST be in Ball Point or Typed

REGISTERED NO.		POSTMARK OF	
R 743-413-486			
Post Office Completion	Reg. Fee \$4.40	Special Delivery \$	
	Handling Charge \$	Return Receipt \$	
	Postage \$ 75	Restricted Delivery \$	
	Received by <i>[Signature]</i>	<i>[Signature]</i>	
Customer must declare Full value \$		<input type="checkbox"/> With Postal Insurance <input type="checkbox"/> Without Postal Insurance \$25,000 Domestic Ins. Limit	
Customer Completion (Please Print)	FROM	STAR FIRST DANCE INC P.O. Box 368 PAGO PAGO AM. SAMOA 96799	
	TO	REGIONAL ADMINISTRATOR ENVIRONMENTAL PROTECTION AGENCY REGION 9, ATTN: W-1-1 1825 MISSION STREET	

PS Form 3806, RECEIPT FOR REGISTERED MAIL (Customer Copy)
 June 1986 San FRANCISCO BUTLER 193

FACSIMILE TRANSMISSION

FROM : Maurice W. Callaghan
STARKIST SAMOA, INC.OPERATOR: Jim LammTRANSMISSION NO: 242DATE: 10-23-91TO : COMPANY U.S. Protection Agency Region 9
LOCATION San Francisco, CA 94105ATTENTION Norman Lovelace / Pat Young
FACSIMILE NO: (415) 744-1604NUMBER OF PAGES: 6 COVER PLUS: _____

CLASSIFICATION: ORDINARY URGENT CONFIDENTIAL

SUBJECT: _____

29 OCT 1990 *Sm*



StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

October 22, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Lovelace:

We are in receipt of your letter of October 19, 1990 which outlines your agency's concerns regarding the monitoring requirements under the Administrative Order. We too are pleased that the high strength waste segregation has resulted in significant reduction in nutrient loadings to the harbor.

In future reports, we will identify the daily maximum values and calculate the monthly averages for the appropriate parameters. Please note that the daily flows reported were those of the effluent. The effluent flow at the plant is the same as the influent except for the addition of a small amount of coagulant and the removal of sludge.

The nitrogen values contained in all our Administrative Order reports were for Total Nitrogen (Kjeldahl plus nitrite/nitrate). We started analyzing for TN in August of 1990 in order to conform to the Administrative Order's requirements. Our latest Discharge Monitoring Report for the month of August 1990, submitted to your agency on September 26, indicates that the analyses were for Total Nitrogen.

We are aware of the Consent Decree's requirement for an interim written status report on the engineering feasibility study to be submitted within 3 months upon the Court's acceptance of the Decree. This status report will be submitted to the US EPA, the American Samoa Government and the High Court of American Samoa on or before November 2, 1990.

Mr. Norman Lovelace
October 22, 1990
Page 2

On the matter of Toxic Substance Monitoring Program, a report was submitted to your agency on March 30, 1990. An extra copy of this report is enclosed for your file. The next sampling event is scheduled to take place during the week of October 29, 1990 and the results will be forwarded to your agency and ASEQC as soon as they become available. Earlier monitoring had not been carried out because of the evidentiary hearing appeal process.

Sincerely,

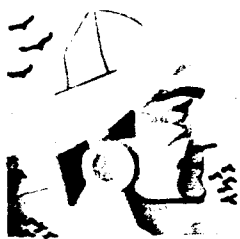
STARKIST SAMOA, INC.



MAURICE W. CALLAGHAN
General Manager

/tl

cc: P. Faiai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, Office of the Attorney General, ASG
J. Ciko
N. Wei
R. A. Ward



Star-Kist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

March 30, 1990

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

Regional Administrator
Environmental Protection Agency
Region 9, Attn: W-1-1
1235 Mission Street
San Francisco, California 94103

h6
EIA

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Pago Pago, American Samoa 96799

Subject: Toxic Substance Monitoring Program
NPDES Permit No. AS0000019

StarKist Samoa hereby submits the following monitoring data as required under the Toxic Substance Monitoring Program of the above referenced NPDES Permit:

	<u>Supply Water</u> <u>(Thaw Water)</u>	<u>Effluent</u>
Cadmium	0.06	0.06
Chromium	0.20	0.12
Lead	0.70	0.40
Mercury	< 0.005	< 0.005
Zinc	0.21	0.43

All concentrations above are reported as milligrams per liter. Samples were collected on January 16, 1990 and analyzed by AECOS the week of February 5th.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on

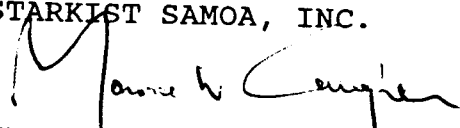


Toxic Substance Monitoring Program
NPDES Permit No. AS0000019
March 30, 1990
Page 2

my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Yours truly,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: N. Wei
R. A. Ward

All Entries MUST be in Ball Point or Typed

REGISTERED NO.

R - 743-413-486

POSTMARK OF



Post Office Completion	Reg. Fee	\$4.40	Special Delivery	\$
	Handling Charge	\$	Return Receipt	\$
	Postage	\$ 25	Restricted Delivery	\$
	Received by	[Signature]		

Customer must declare Full value \$

☐ With Postal Insurance ☐ Without Postal Insurance
\$25,000 Domestic Ins. Limit

Customer Completion (Please Print)

FROM	STAR FIRST DAND INC
	P.O. Box 368 PAGO PAGO
	AM. SAMOA 96779
TO	REGIONAL ADMINISTRATOR
	ENVIRONMENTAL PROTECTION AGENCY REGION 9, ATTN: W-1-1
	1225 MISSION STREET

PS Form 3806, RECEIPT FOR REGISTERED MAIL (Customer Copy)
June 1986 SAN FRANCISCO CALIFORNIA 74103



8 April 91.

Pat,

Per your request

1 set of Engineering Report
1 copy of UAA Report

Norma

StarKist Seafood Company

An Affiliate of H.J. Heinz Company



Rec'd 3/18/91
180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900

14 March 1991

Mr. Pati Faiai
Executive Director
Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa

Mr. Norman Lovelace
Chief of Enforcement
OPINAP
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Gentlemen:

StarKist Samoa Inc.'s Consent Decree with the American Samoa Government requires the company to complete an engineering feasibility study on disposal alternatives by March 31, 1991.

Please find enclosed a copy of the engineering feasibility study report prepared by the environmental consulting firm of CH2M Hill under contract to StarKist Samoa Inc.

If there are questions about this report, please feel free to contact me at (213) 590-3873.

Sincerely,

A handwritten signature in dark ink, appearing to read "Norman S. Wei", written over a horizontal line.

Norman S. Wei
Manager, Environmental Engineering

cc: R. Ward
M. Callaghan

Copy to Mike
Not a

Star-Kist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

FACSIMILE TRANSMISSION

Date: March 8, 1991FROM: Maurice W. Callaghan

Panafax Number: (684) 644-2440

Transmission #: _____ # Pages: 1 + 4 Classification: Urgent Please!!To: Mr. Norman LevelaceLocation: OPINAP, U.S. ENVIRONMENTAL PROTECTION AGENCY, 75 HAWTHORNE ST.
SAN FRANCISCO, CA.Fax Number: (415) 744-1605

FAX MESSAGE

If you have not received all pages of this transmittal please
call us at (684) 644-1835. Thank you.

N-
Norman Wei called ~~this~~ wh re: this, so I told
him to send letter. I also called Jim Cox +
told him same re: temp. and to send letter.

JH



**StarKist SAMOA, Inc.**

P.O. BOX 368

PAGO PAGO

AMERICAN SAMOA 96799

March 7, 1991

Mr. Norman Lovelace
OPINAP
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA.

Dear Mr. Lovelace:

StarKist Samoa hereby requests that the U.S. Environmental Protection Agency extend the interim temperature limitation of 90°F in StarKist Samoa's NPDES permit to March 6, 1992.

The reason for this request is provided below:

At the present time, StarKist Samoa is meeting the interim temperature limit of 90°F. On March 8th 1991, American Samoa's water quality standard for temperature will go into effect under the plant's NPDES Permit. The maximum temperature limitation will be 85°F. StarKist Samoa, Inc. will not be able to meet this limitation at all times by this date.

In order to meet this new temperature limit, StarKist Samoa began the implementation of a temperature control management system about 6 months ago at a cost of \$240,000. The system is briefly described below:

1. The scrubber water in the reduction plant will be recycled. This will eliminate about 200,000 gallons of scrubber water at over 95°F.
2. The boiler blowdown water and the can wash water will be routed to a new sump and processed through a new cooling tower which will cool the water temperature from 150°F to 95°F. The cooled water will then be discharged to the retention tank.
3. Cold thaw water will be retained in a holding tank fitted with the necessary pump and valve control system to enable it to feed cold thaw water into the treatment plant when temperature of the treatment plant exceeds a certain level.

This system is now 80 percent complete and commissioning is scheduled for early May 1991. Although this system is designed to achieve American Samoa's water quality standard for temperature,

Mr. Norman Lovelace

March 7, 1991

Page 2

+++++

A start-up period and extensive testing of full-scale operation are required. For this reason, StarKist Samoa requests that a variance be granted by the Environmental Quality Commission until March 6, 1992.

StarKist Samoa fully expects to meet the temperature standard by March 7, 1992.

StarKist Samoa, Inc. has submitted its application to American Samoa Government for variance from temperature requirements of the Section 24.02606 (a) (6), Water Quality Standards.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: P. Faiai - EQC
R. A. Ward
N. Wei



StarKist SAMOA, Inc.



P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

March 7, 1991

Mr. Pati Faiai
Executive Secretary
The Environmental Quality Commission
Office of the Governor
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

Pursuant to Section 24.0141, ASCA of the Environmental Quality Act, StarKist Samoa, Inc. hereby requests variance from temperature requirements of the Section 24.02606 (a) (6), Water Quality Standards.

The reason for this application is provided below:

At the present time, StarKist Samoa is meeting the interim maximum temperature limit of 90°F under the plant's NPDES discharge permit as issued by the U.S. Environmental Protection Agency.

On March 8th 1991, American Samoa's water quality standard for temperature will go into effect under the plant's NPDES Permit. The maximum temperature limitation will be 85°F. StarKist Samoa, Inc. will not be able to meet this limitation at all times by this date.

In order to meet this new temperature limit, StarKist Samoa began the implementation of a temperature control management system about 6 months ago at a cost of \$240,000. The system is briefly described below:

1. The scrubber water in the reduction plant will be recycled. This will eliminate about 200,000 gallons of scrubber water at over 95°F.
2. The boiler blowdown water and the can wash water will be routed to a new sump and processed through a new cooling tower which will cool the water temperature from 150°F to 95°. The cooled water will then be discharged to the retention tank.
3. Cold thaw water will be retained in a holding tank fitted with the necessary pump and valve control system to enable it to feed cold thaw water into the treatment plant when temperature of the treatment plant exceeds a certain level.

Mr. Pati Faiiai
March 7, 1991
Page 2

=====

This system is now 80 percent complete and commissioning is scheduled for early May of 1991. Although this system is designed to achieve American Samoa's water quality standard for temperature, a start-up period and extensive testing of full-scale operation are required. For this reason, StarKist Samoa requests that a variance be granted by the Environmental Quality Commission until March 6, 1992.

StarKist Samoa fully expects to meet the temperature standard by March 7, 1992.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl

cc: N. Lovelace - US EPA
R. A. Ward
N. Wei

2/11/91 Received



Star-Kist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

1 February 1991

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

Mr. Norman Lovelace
OPINAP (E-4)
U.S. Environmental Protection
Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental
Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

INTERIM STATUS REPORT ON ENGINEERING FEASIBILITY STUDY

All the engineering field studies have been completed by CH2M Hill, StarKist Samoa's environmental consultants. The results are undergoing review by the consultants. The final report is in the process of being compiled and will be submitted in its entirety on or before the deadline of March 31, 1991.

StarKist Samoa is proceeding with its discussion with Samoa Packing on the possibility of a joint pipeline to meet American Samoa's water quality standards.

Sincerely,

STARKIST SAMOA, INC.


MAURICE W. CALLAGHAN
General Manager

/tl





Copy to file
EPA rec'd
7 FEB 1991

AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799
OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY

In reply refer to:
Serial: 102

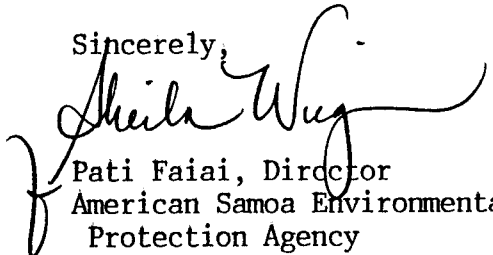
January 23, 1991

Maurice Callaghan
General Manager
Star Kist Samoa
P. O. Box 368
Pago Pago, American Samoa 96799

I would like to inform you on necessary reporting requirements for the American Samoa Government - Star Kist Consent Agreement concerning water quality improvements for Pago Pago Harbor. In order for ASG to determine compliance with the interim limits contained in the consent decree, you must continue to submit a monthly report with the results of analysis completed and a statement concerning any deviations from the interim limits contained in the consent decree. While the U.S. Environmental Protection Agency (USEPA) only requires quarterly reporting at this point, the consent agreement compliance is based on monthly results. Also, the High Court requires us to provide a report on compliance with the consent agreement every three months. The due dates for reports to the High Court do not correspond to the quarterly DMR due dates thus preventing us from having the necessary information. USEPA has informed me that submitting monthly reports on a monthly basis or along with your quarterly DMR will be adequate for their needs.

Please submit the monthly report for December as soon as possible. Please feel free to contact me or Sheila Wiegman of my staff if you have any questions on the above.

Sincerely,


Pati Faiai, Director
American Samoa Environmental
Protection Agency

cc: Pat Young, USEPA
Virginia Gibbons, Attorney General's Office
Enforcement Branch, ASEPA
Environmental Coordinator, ASEPA



StarKist Seafood Company

An Affiliate of H.J. Heinz Company



EPA rec'd
26 DEC 1990
180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900

December 19, 1990

Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Lovelace:

I am writing this letter concerning StarKist Samoa's interim effluent limitations under EPA's Administrative Order.

As we all know, these interim effluent limitations were developed on the basis of some theoretical assumptions with respect to the percentage of nutrients that would be removed through high strength waste segregation. The percentage figures most frequently used had been 50 to 60 percent removal through segregation alone. That was precisely the reason why your agency required us to conduct the 3-month intensive sampling program from August to October.

As I stated in my letter to you dated March 1, 1990, I think it is important that the interim limitations be re-evaluated and adjusted accordingly based on actual field data.

Actual field data show a much lower percent segregation of total phosphorus. A comparison of influent phosphorus loadings from January 1990 to July 1990 with the post segregation period (August to November 1990) shows that only 36.5 percent of the phosphorus were removed through segregation of high strength waste (See attached table). This is substantially below the theoretical assumption of 50 to 60 percent which was used in developing the interim limitations. The percent segregation for total nitrogen is approximately 67 percent - much more in line with the assumption.

Based on the above findings, we would respectfully request that you adjust the effluent limitation for total phosphorus accordingly.

Yours very truly,

Norman S. Wei
Manager, Environmental Engineering

cc: J. Ciko, Jr.
M. Callaghan
R. Ward

Before High Strength Waste Segregation

	Influent TP Loading (#/day)	Effluent TP Loading (#/day)	Influent TN Loading (#/day)	Effluent TN Loading (#/day)
January 90	726	219	6191	3147
February 90	678	224	6469	2775
Mar 90	935	347	8538	3376
April 90	1106	383	9230	3222
May 90	1147	333	7781	2941
June 90	1178	430	7881	2919
July 90	1001	319	6523	2335
Average Jan 90 – July 90	967	322	7516	2959

During High Strength Waste Segregation

	Influent TP Loading (#/day)	Effluent TP Loading (#/day)	Influent TN Loading (#/day)	Effluent TN Loading (#/day)
August 90	745	190	3337	1326
September 90	647	169	2343	1070
October 90	530	145	2085	1226
November 90	536	150	2272	1119
Average Aug 90 – Nov 90	615	164	2509	1185

% segregation	36.5%	66.6%
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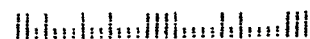
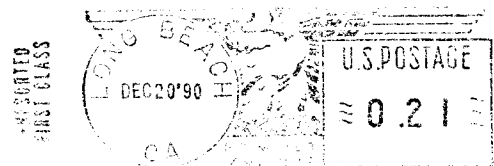
StarKist Seafood Company

An Affiliate of H. J. Heinz Company

180 East Ocean Boulevard
Long Beach, California 90802-4797



Mr. Norman Lovelace
OPINAP (E-4)
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105



OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX NO: (415) 744-1604 FTS 484-1604
VERIFICATION NO: (415) 744-1599 FTS 484-1599

DATE: 10/19/90 PAGES: 5 (incl. cover)

TO: Maurice Callaghan
ORGANIZATION: Star Kist Samoa
FAX NO: (684) 644-2440 PHONE NO: (684) 644-4231
SUBJECT: High Strength Waste Intensive Monitoring Reports

FROM: Pat Young
ORGANIZATION: USEPA
PHONE NO: (415) 744-1591

NOTE:

10/19/90

16:01

☎415 556 8594

EPA R-9 OEA

☑001

ACTIVITY REPORT

TRANSMISSION OK

TRANSACTION #	5071
CONNECTION TEL	82135903882
CONNECTION ID	G3
START TIME	10/19 15:59
USAGE TIME	02'29
PAGES	5

OPINAP FAX TRANSMISSION

USEPA, Region IX
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105

FAX NO: (415) 744-1604 FTS 484-1604
VERIFICATION NO: (415) 744-1599 FTS 484-1599

DATE: 10/19/90 PAGES: 5 (incl. cover)

TO: Norman Wei
ORGANIZATION: Star-Kist Seafood Company
FAX NO: (213) 590-3882 PHONE NO: (213) 590-3873
SUBJECT: High Strength Waste Intensive Monitoring Reports

FROM: Pat Young
ORGANIZATION: USEPA
PHONE NO: (415) 744-1591

NOTE: _____

October 19, 1990

VIA FAX

Mr. Maurice Callaghan
General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

We are in receipt of your company's intensive monitoring reports for the months of August and September, 1990 for your cannery's waste streams as required by the Administrative Order issued by the U.S. Environmental Protection Agency on June 18, 1990 and the Consent Decree in Civil Action No. 66-90, issued by the High Court of American Samoa on August 3, 1990. In general we are pleased that the monitoring results show a significant decrease in nutrient loading to the harbor as a result of the institution of high strength waste segregation and disposal and DAF treatment of cannery effluent.

According to the administrative order, the three-month intensive monitoring regime requires composite samples to be collected twice weekly for the following waste streams: precooker juice, presswater, DAF influent and DAF effluent. The flow of each sample of these waste streams is to be reported and each waste stream sample is to be analyzed for the following parameters: total nitrogen, total phosphorus, total suspended solids, and oil and grease. Additionally, the daily maximum and monthly average of each parameter should be reported.

In general the reports submitted are complete; however, for certain parameters and waste streams, the daily maximum and monthly averages were not reported (see enclosed chart) as required. While the data already submitted will enable us to calculate the daily maximum and monthly averages, future reports should clearly specify these figures (especially for total nitrogen and total phosphorus for the DAF effluent.) Additionally, the daily flows reported for either the influent or effluent for the months of August and September were not labeled "influent" or "effluent", thus one set of flows is missing. (We assume the flows reported were effluent flows.) Please provide us with the missing flow data and clarify whether the reported flows are effluent or influent. If this data are not available, we would appreciate a written explanation.

SYMBOL

SUBNAME

DATE

U.S. EPA CONCURRENCES

OFFICIAL FILE COPY

While the nitrogen values reported are labeled as total nitrogen (TN), your latest Discharge Monitoring Reports indicate the effluent was only analyzed for total Kjeldahl nitrogen (TKN). Are the waste streams for the intensive monitoring program being analyzed for TN or only TKN? If samples are actually being analyzed for only TKN, this should be clarified for the reports already submitted and corrected for future reports, as the administrative order requires analysis for TN (nitrite/nitrate plus Kjeldahl).

As you may recall, the purpose of the intensive three-month monitoring after the institution of high-strength waste segregation and disposal is to collect data to evaluate its effectiveness and the efficiency removal rate of the Dissolved Air Flotation (DAF) process. At its discretion, EPA will utilize this data to make any necessary adjustments in the DAF removal efficiency rate (and therefore the interim effluent limits for nitrogen and phosphorus). Thus it is of utmost importance that the most accurate and complete data be submitted.

Also, as a reminder, the administrative order requires Star-Kist to submit to EPA and the American Samoa Environmental Quality Commission interim written status reports regarding its engineering feasibility study or studies on alternatives for achievement of its NPDES permit final effluent limits. Such reports should be submitted no less often than once every three months. If such a report for the first three months of the administrative order has already been sent to us, please disregard this notice, otherwise please let us know when to expect it, and, if there is a delay, the reason for the delay.

In a related matter, review of the reports submitted by your company as required by your NPDES Permit No. AS0000019 shows that no reports have been submitted to EPA as part of Star-Kist's Toxic Substance Monitoring Program. As specified in Part I.A.6 of the permit, twice yearly, beginning March 8, 1987 through March 7, 1992, cannery supply water and effluent must be analyzed for cadmium, chromium, lead, mercury and zinc. To date, we should have received at least seven such reports but have received none. Thus, within 15 days of receipt of this letter, please provide us with these reports, or if these reports are not available, a written explanation as to why they are not available. Additionally, if no toxic substance monitoring has been done within the past six months, such monitoring should be done within the next two months and results submitted to EPA as well as a schedule for future monitoring every six months.

-3-

If you have any questions, please contact Pat Young at (415) 744-1591 or Mike Lee at (415) 744-1592.

Sincerely,

Norman L. Lovelace
Chief, Office of Pacific Island
and Native American Programs

Enclosure

cc: Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Virginia Gibbons, Office of the Attorney General, ASG
Norman Wei, Star-Kist Seafood Company

SUMMARY OF DATA REPORTED/NOT REPORTED BY STAR-KIST SAMOA, INC.
AS REQUIRED BY EPA ADMINISTRATIVE ORDER AND ASG CONSENT DECREE

PARAMETER	PRECOOKER		PRESSWATER		DAF INFLUENT		DAF EFFLUENT	
	Aug.	Sep.	Aug.	Sep.	Aug.	Sep.	Aug.	Sep.
TOTAL NITROGEN								
Each Day's Sample	X	X	X	X	X	X	X	X
Daily Maximum	O	O	O	O	O	O	O	O
Monthly Average	O	O	O	O	X	X	X	X
TOTAL PHOSPHORUS								
Each Day's Sample	X	X	X	X	X	X	X	X
Daily Maximum	O	O	O	O	O	O	O	O
Monthly Average	O	O	O	O	X	X	X	X
TOTAL SUSPENDED SOLIDS								
Each Day's Sample	X	X	X	X	X	X	X	X
Daily Maximum	O	O	O	O	O	O	O	O
Monthly Average	O	O	O	O	O	O	O	O
OIL AND GREASE								
Each Day's Sample	X	X	X	X	X	X	X	X
Daily Maximum	O	O	O	O	O	O	O	O
Monthly Average	O	O	O	O	O	O	O	O
DAILY FLOWS								
Each Day's Sample	X	X	X	X	?	?	?	?
Daily Maximum	O	O	O	O	O	X	O	O
Monthly Average	O	O	O	O	O	X	O	O

X = data reported
O = data not reported

? = Flow rates were reported but not specified as to influent or effluent flow.

• M. W. i. called re:
A/O → requirement to
send sample results
w/in 7 days of end
of month for testing.

Due to large # of samples,
ran out of free; sent some
samples off-island
for analysis. ^{Cannery} Local lab
overwhelmed.

Will prob. get report
to us Monday or Tues.
9/7 RA

StarKist fish cleaners riot over low pay

Women of Star Kist Samoa's Packing Room walked off their jobs en masse last Friday, overturning trash cans on the streets, bales of fish in the plant and shouting obscenities at supervisory staff. "It was ugly," said one witness. "It was like a scene out of a movie. The women were wild."

According to some of the striking employees, they were protesting salary increases for employees of a new program called the Yield Improvement Program. These employees are making more than \$3 an hour while everyone else is still getting an hourly wage of \$2.90.

The unhappy packer told *Samoa News* that management had promised them wage increases since November of last year and up to now had not delivered on that promise. "Their latest word to us was that we would get an increase in August," she explained. "August came and went and we're still sweating it out at our old wages."

Another cause for discontent among the employees was that their hours had been cut back from 8 to 6 1/2 per day. The cannery has been operating on the reduced schedule for three weeks.

According to the employee, who has been with the company for close to 10 years, the last straw was when they found out that the Yield Improvement Program employees were being paid higher wages. They decided to walk out. Only employees of the Packing Room were involved in the walk-out. Other production divisions were not affected.

When the day shift reported to work Friday morning, they stood at their tables and banged their knives before filing out of the plant and onto the streets where they stood around grumbling. They were dispersing as the night shift was reporting to work.

A senior cannery employee, who was there at the time, said that the night shift employees, upon entering the plant, overturned bales of fish on the

floor and damaged some of the machines. They sang and danced their way out onto the streets and proceeded to empty trash cans on the road.

Traffic was blocked for almost an hour as the women milled about and danced on the street. At one point they were shaking the StarKist fence and shouting obscenities at the management staff.

Police cars, fire trucks and ambulances were called to the scene to try and disperse the rioters. One of the seven police officers who were called to the scene called the women "uncontrollable". "It was almost impossible trying to get them off the main road and let traffic through," he told *Samoa News*. He said that their last resort to disperse the crowd was to use the fire truck hoses. The women let up when they saw that was about to happen.

Two protesters were taken into police custody for disobeying police orders to get off the main road. The two continued to throw soda cans and trash onto the road after repeated orders from police to stop. They were jailed for less than 24 hours.

The officer said he was overwhelmed by the protesters' actions. "I've never seen anything like it here," he commented. "It was like those riots you see on the news."

When one protester was asked why they had opted to take this route instead of talking with their supervisors, she remarked that they were tired of "lies". "They have been promising to hike our pay since last year. We've been waiting and waiting and they give others a pay raise and us long time employees are left without anything," she told the *News*.

Samoa News understands that the strike leaders have made their grievances known to the Acting Manager of Star Kist Samoa, Mark Anthony, who has reportedly told them Friday to go home and wait for a "company decision". (Star Kist Manager Maurice

(Continued on page 3)

RIOT

from page one

Callaghan was off island, but was scheduled to return last evening)

Reliable sources indicate that the company is considering having only one shift (the day shift) instead of two. A senior staffer in the Personnel Division was quoted by sources as saying that the company will come down hard on the night shift employees and there is a good possibility that everyone who was involved in the night shift "riot" will be given walking orders.

Samoa News tried repeatedly to contact Anthony and other senior Star Kist officials for comment but was unsuccessful. Production personnel won't report to work until Tuesday and it won't be known until then how the cannery operation will be affected by last Friday's events.

Talk w/ Arnold when?

9/24/90

To: Pat Young, OPINAP
From: Sheila Wiegman, ASEPA
Re: Letters

Attached are the letters from Star-kist and Samon Packing. I will write a memo to Dyke laying out how Star-kist violated the limitations and reporting requirements. I appreciate and look back on those letters from you.

1. EPA could write letter to court (but start w/ASG)
2. "Hit 'em hard now, let up latter" strategy
3. EPA keeping own tab on violations
4. Annoyed with reference to EPA - not truthful

- A.S. Analyze samples to?

9/25/90

Sheila:

Thanks for the letters. (I received one from StarKist and Ginnie's. Was there a letter from Samoa Packing? You mentioned one from SP in your transmittal.) I think Ginnie's letter is ok and lays out StarKist's obligations (she could have emphasized the penalty part more though). StarKist's letter is wrong and misleading re: EPA's denial of their test run, but did we expect anything else?

I consulted with Mike and Ann Nutt, and I'm sure Norm would agree, that ASG should definitely pursue collecting stipulated penalties for any violations of the IEL that occur, especially right now, in the beginning. From an enforcement strategy perspective, you want them to know that you mean business, and that the negotiated consent agreement means something. If ASG is conciliatory now, what happens with the rest of the stipulated penalties and compliance dates? The canneris will be negotiating on every violation or compliance issue. ASG could exercise its enforcement discretion later, ~~xxxx~~ for really major or uncontrollable instances.

USEPA, of course, ~~xxxxxx~~ can't really do much if ASG decides not to collect this stipulated penalty, although, I guess we could write to the court to try to have the court make ASG do it. But that would only be a last resort measure, and I'm not sure if Norm would go along with it (he might, though). EPA is keeping its own "tab" of the violations, and we could also do an enforcement action if things get serious.

Re: StarKist's letter, it was Tom Redick of Samoa Packing who first brought up the subject of using the Astro in July for test runs. I called Norman Wei asking him if this is what SK wanted to do also, and told him to send a letter to us requesting this also, as we could not unilaterally do this for both permits based on Samoa Packing's request. As indicated in our letter of 7/24/90, we could not grant their request to dump at the new dump site because that site was not effective until August 1, (as noticed in the Federal Register). There was nothing we could do about that. However, we did allow them to use the Astro to make test runs to the new site, but they had to dump at the old site. I don't think that's a categorical denial. Call me if you want to discuss further.

P.S. Arnold Den is available any time. ~~xxxxxxknowwhat'sxxx~~ Pls set a time when we should call. Thanks.





StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO. (684) 644-2440

20 September 1990

Mr. William Coleman
Chairman
Environmental, Quality Commission
Office of the Governor
Pago Pago, American Samoa 96799

Dear Mr. Coleman:

I received the Assistant Attorney General's September 13th letter to John Ward concerning the alleged violation of the monthly average limitations for phosphorus.

If you recall, the installation of StarKist Samoa's high strength waste segregation system was completed ahead of the deadline of August 1, 1990 as stipulated in the Consent Decree. Once the system was installed, our engineering staff wanted to have an opportunity to conduct a trial run of the system using actual high strength wastes. We wrote to the US EPA on July 18, 1990 to obtain special permission to conduct a trial run of the system from start to finish, ending at the ocean dump site. This request was categorically denied by the Agency.

Without such an opportunity, our plant personnel were forced to start up the system on August 8th when the plant began production without any opportunity to test it out. As you are aware, this delay in start up was caused by the Astro registration problems. As expected, we experienced extensive operational problems on August 8th, 24th and 28th with our internal high strength wastes delivery system.

Notwithstanding the above operational difficulties, our plant had achieved significant reduction in loadings to the harbor. Specifically, the high strength waste segregation has reduced the loading of phosphorus and nitrogen to the harbor by over 40 percent.

From the day we entered into negotiation with your government on the Consent Decree, we have acted in good faith with the hope and tacit understanding that the American Samoa Government would recognize the predicament that our industry faces. We urge your

Mr. William Coleman
September 20, 1990
Page 2

government to take into full consideration the above extenuating circumstances which have caused us to have these operational problems during the startup phase.

As we were negotiating with the US EPA on the interim effluent limitations, it was clearly understood that the first three months commencing from August 1, 1990 were to be a "test period" - hence the intensive sampling program. It was agreed to by all parties that the interim effluent limitations would be reviewed and possibly adjusted at the agency's discretion at the end of the 3-month intensive sampling period.

We were somewhat heartened by the language in the September 13th letter which states that "the local EPA and (the Attorney General's) office seek compliance with the agreement -- not penalties". We too seek full compliance with the agreement. Our efforts thus far have amply demonstrated that. It is our every intention to continue to work with you and your government to arrive at a reasonable and cost-effective solution.

Yours very truly,

STARKIST SAMOA, INC.



MAURICE-W. CALLAGHAN
General Manager

/tl



AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799
OFFICE OF THE ATTORNEY GENERAL

In reply refer to:

Serial:1122-90

September 13, 1990

John Ward
Attorney for Starkist Samoa, Inc.
Law Office of Ward and Associates
Fagatogo, American Samoa 96799

In re: Reporting Requirements under
Consent Agreement, C.A. 65-90

Dear John:

I received a verbal report from the local EPA on Wednesday, September 12, that Starkist Samoa, Inc., had violated the "monthly average" effluent limitation for phosphorus for the period of August 8-31, 1990.

I would like to direct your attention to section VII, the "Force Majeure" section of the Consent Agreement. Paragraph C states that a report is to be filed with the Court and this office (in addition to the local and Federal EPA's) if "any event occurs which causes or may cause" a violation of any provision of the consent decree.

I regret that such a general reporting requirement is subsumed under the Force Majeure section. In an earlier draft, we had a duplicate of that provision elsewhere and removed it. Nevertheless, it exists, and should be complied with.

It is essential that such reports be filed here, since the Court's Opinion and Order of August 3 requires that this office submit quarterly reports of compliance commencing October 31 of this year.

Section V of the agreement, entitled Stipulated Penalties, sets the penalty for violation of the monthly average effluent limitation at \$10,000 for the first month. According to paragraph H of the same section, stipulated penalties shall be paid without demand, delivered to this office by the 30th of the following month--in this case, September.


Serial:1122-90

John Ward

September 13, 1990

-2-

The local EPA and this office seek compliance with the agreement--not penalties. It is my most sincere desire that operations at the plant proceed in such a way that further stipulated penalties are not incurred. Your continued cooperation and assistance in this matter is appreciated.


VIRGINIA L. GIBBONS
Assistant Attorney General

cc: Grover Joseph Rees III, Associate Justice
Attorney General
Maurice Callaghan, President & General Manager
Starkist Samoa Inc.,
William "Dyke" Coleman, Chairman, EQC
Pati Faiai, ASEPA
Sheila Weigman, ASEPA

★ StarKist plans huge new can plant in Tafuna

Will the canneries leave?
When will the canneries leave?

These are common questions asked by local residents concerned about the future of the territory. They are also common questions asked by the canneries' corporate officials of themselves, as they seek to maintain and increase their profit levels for the benefit of their shareholders.

Recently, StarKist completed an internal analysis of whether to remain in American Samoa or pull up stakes and leave. The company concluded that it was time to pull up stakes UNLESS a new deal could be negotiated with the American Samoa Government.

As a result, company officials began negotiating with government officials last year about a new tax exemption/investment agreement. After months of negotiations, a new agreement was signed by the governor in late November and, as a result, StarKist has committed to another ten years of local operation.

Although StarKist's commitment is not legally enforceable, company officials recently explained to the Samoa News that the company now intends to stay in Samoa as long as the local operation becomes and remains competitive globally.

"International factors are driving the tuna industry. Tuna canners in Thailand are already able to land tuna in the

United States for 10% less than we can. We have to close that gap by reducing the cost of packing tuna, and if we can't close it in American Samoa, we will have to look for someplace where we can. The recent negotiations were absolutely key to our being able to become competitive. We needed to make major investments to become competitive and we needed a new tax agreement to make those investments viable. Without a new agreement, we wouldn't have been able to justify keeping this plant open," StarKist Samoa General Manager Maurice Callaghan told the Samoa News.

Central to the new agreement is StarKist's decision to reduce local operating costs by investing \$10 million in a new can manufacturing plant in Tafuna. Although no site has yet been finalized for the new plant, 4 acres will be required to house the proposed 2.5 acre (100,000 square foot—or more than two football fields) facility.

"Right now, we import steel that has already undergone a lot of processing in Japan and elsewhere. Our can plant in Atu'u merely performs

(Continued on page 11)

Part A

* STARKIST CAN PLANT

from page 1

the finishing work of putting the can together. With our proposed new can plant in Tafuna, we will be able to import raw steel and perform a lot of the processing here on Tutuila. This will reduce the cost of packing tuna in American Samoa by 5%, as well as providing 50 new jobs," explained Ralph Ward, Vice President of StarKist Seafood, StarKist Samoa's parent company.

StarKist intends to spend \$3 million building their new factory building and another \$7 million equipping it with "state-of-the-art" machinery. The Tafuna plant will be a "high-tech," highly automated facility.

In addition to the \$10 million investment at Tafuna, StarKist will be spending more than \$4 million to replace their existing Fish Meal Plant in Atu'u with a brand new plant, and will invest additional monies in other improvements at the Atu'u plant.

(StarKist produces both fish meal and pet food as byproducts of its tuna packing operation. Pet food accounts for about 20% of the tonnage produced in Atu'u, while fish meal, which is sold primarily to the Japanese for fertilizer, accounts for a much smaller

percentage.)

StarKist and Sampo Packing are just completing the new multi-million wastewater pipeline required by the government to preserve and improve water quality in Pago Pago Harbor.

Ward told the Samoa News that "most of the investments will not replace human labor." In fact the largest investment, the can plant, will provide skilled jobs for 40 local workers — StarKist will hire no additional off-island experts for the can plant.

"We operate a can plant at our Puerto Rico canning operation and thus already have the expertise within the company to run this plant. We will be using existing off-island staff and training local workers to operate and maintain the sophisticated machinery," Callaghan said. "The jobs we create at Tafuna will not be minimum wage jobs," he clarified.

The new investments will not, by and large, result in any loss of employment for the

minimum wage jobs which constitute about 75% of their 2500-person workforce. For example, StarKist said they have no plans to introduce labor saving machinery on the fish cleaning lines, nor to introduce a "loining" operation that would shift some of the fish cleaning work to another location outside of American Samoa.

(Minimum wages in the tuna canning industry are between \$2.85 and \$3.00 an hour.)

Over the past five years, production at StarKist has increased by 10%, while continuing efforts to boost efficiency and productivity have enabled the canner to drop employment levels by 3%.

Two production shifts are scheduled each day, Monday through Friday, while a third shift works overnite performing maintenance and clean-up. This schedule enables the canner to produce at full capacity, which is 105,000 tons of canned tuna each year.

None of the new improvements are intended to boost that production capacity.

In return for their commitment to make investments in American Samoa, ASG agreed to reduce StarKist's tax rate by approximately 50%. Although the formulas are complex, it is generally true that the old tax rate was about 20%, while the new tax rate is about 10%. Without an exemption, the canner would be faced with a

Part B

corporate tax rate as high as 46%, but cannery officials make it clear that if they were forced to pay full tax rates, they would leave and pay nothing instead.

Likewise, they say that if the old tax rate of 20% had remained in effect, they would have left as well.

(Callaghan told the Samoa News that in Puerto Rico, StarKist Caribe pays an effective tax rate of only 4.5%, and he noted that many other costs—such as electricity and water—are much cheaper in Puerto Rico. StarKist Caribe pays its fish cleaners a much higher wage than StarKist Samoa—somewhere in the neighborhood of \$6 an hour—but the tuna industry has been abandoning Puerto Rico in the past few years due to a variety of factors, of which high wage rates is one.)

Under the new rate structure, StarKist pays a lower tax rate percentage than previously, but company officials claim that the investments they are making will boost productivity and thereby increase the tax-

able profit levels of the local operation. Their analysis shows that the new tax exemption/investment agreement will net ASG \$8 million more, over a ten year period, than the old agreement, but they stress that the old agreement (which would have expired next year) wasn't an option, because they would have pulled up and moved out if they were unable to negotiate a new agreement.

One provision of the new agreement that is worrying StarKist, as well as Coleman administration officials, is the commitment by ASG to maintain stable wage rates locally. That unenforceable promise is threatened by federal action—either through the once-every-two-years Minimum Wage Committees that review and set American Samoa's minimum wages, or by the new "wild card" on the scene: Congressmen Austin Murphy's proposed bill to increase American Samoa's minimum wage to the mainland level of \$4.35 an hour over a three year transition period.

Both canneries have issued

public statements declaring that such an action would compel the canneries to review the viability of remaining in American Samoa.

provoke the canneries to leave American Samoa. Congressman Eni F.H. Faleomavaega initially expressed support for Murphy's bill, but is now assuming a wait-and-see attitude.

Notwithstanding the minimum wage uncertainty, StarKist told the Samoa News that it hopes to begin the can plant project before the end of 1992. "We have not decided to hold the project up in any way as of yet, however, continued uncertainty could impact our decision making," Callaghan cautioned.

It will take 18-24 months from the time ground is broken before the can plant will be operational. No contractor has been chosen for the project, which will be American Samoa's largest building, but StarKist is committed to using local workers and local construction companies as much as possible.

Part C



United States Environmental Protection Agency
Washington, D. C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 <u>N</u> 2 <u>5</u> 3 <u>A</u> <u>S</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>1</u> <u>9</u> 11 12 <u>9</u> <u>0</u> <u>1</u> <u>1</u> <u>1</u> <u>3</u> 17			18 <u>C</u>	19 <u>R</u>	20 <u>2</u>
Remarks					
21 _____ 66					
Reserved	Facility Evaluation Rating	BI	QA	Reserved	
67 _____ 69	70 <u>3</u>	71 <u>N</u>	72 <u>N</u>	73 _____ 74	75 _____ 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Permit Effective Date
StarKist Samoa, Inc.	11:00	3-8-87
Pago Pago, Tutuila	Exit Time/Date	Permit Expiration Date
American Samoa	12:20 pm/11-13-90	3-7-92
Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Robert Higgins	WWTS Supervisor	
Name, Address of Responsible Official	Title	
Maurice Callaghan	General Manager	
StarKist Samoa, Inc.	Phone No.	Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
P.O. Box 368, Pago Pago, A.S.		

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

<u>S</u> Permit	<u>S</u> Flow Measurement	<u>N</u> Pretreatment	<u>S</u> Operations & Maintenance
<u>S</u> Records/Reports	<u>N</u> Laboratory	<u>S</u> Compliance Schedules	<u>N</u> Sludge Disposal
<u>S</u> Facility Site Review	<u>S</u> Effluent/Receiving Waters	<u>M</u> Self-Monitoring Program	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

See Attached Inspection Report

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
<u>Michael J. Lee</u> Michael J. Lee	EPA Region 9 415-744-1592	9-17-91
Signature of Reviewer	Agency/Office	Date
Regulatory Office Use Only		
Action Taken	Date	Compliance Status <input type="checkbox"/> Noncompliance <input type="checkbox"/> Compliance

NPDES INSPECTION REPORT
STARKIST SAMOA, INC.

On November 13, 1990 the EPA conducted an inspection of the StarKist Samoa, Inc. (StarKist) tuna cannery, Tuluila Island, American Samoa.

The cannery receives whole tuna which is processed into canned tuna and dried fish meal. Waste streams from the cannery consist mainly of fish wastes, fresh water, press water, pre-cooker juice and sea water. The fish wastes, fresh water, press water, pre-cooker juice are treated by the cannery's waste treatment plant. The sea water is used as a once through thaw water and does not pass through the DAF treatment unit. The treatment plant consist mainly of a dissolved air flotation unit that utilizes polymers and coagulant (alum) to enhance solids recovery. Effluent from the DAF treatment facility is discharged to Pago Pago Harbor via a pipe line which extends directly out from the cannery. Sludge from the DAF treatment facility and high strength wastes (press water and pre-cooker juice) are barged to a designated ocean disposal site which is regulated separately under an ocean dumping permit, No. OD 90-02. The ocean disposal site is approximately 5.5 miles southwest of Pago Pago Harbor. Both canneries (StarKist and Samoa Packing) utilize the same ocean dumping site and vessel to dispose sludge.

The cannery has a daily tuna processing capacity of about 500 tons/day. The cannery averaged approximately 396 tons/day for the month of November, 1990. The effluent flowmeter indicated a flow of about 2.7 MGD at the time of the inspection. The cannery averaged approximately 1.68 MGD for the month of November, 1990. The effluent temperature meter indicated a temperature of 85 F and a pH of 7.5 at the time of the inspection.

StarKist's NPDES permit was issued in March, 1987. Both canneries (Samoa Packing and StarKist) sought an evidentiary hearing on certain of the provisions of the permit, including the requirement regarding compliance with the interim effluent limitations for nitrogen and phosphorus of the permit. In September, 1989 the canneries appeal was denied by EPA and ruled that the interim effluent limits set forth in the permit for nitrogen and phosphorus were effective immediately and put the canneries in non-compliance with their permits. Although the canneries sought an appeal it was denied in November, 1989. Although Samoa Packing decided to file a petition for review by the Ninth Cir

cuit Court of Appeals in February, 1990, it did not appear that a favorable decision would be forth coming. As a result settlements were negotiated with EPA and the American Samoa government.

On June 18, 1990, EPA issued an administrative order, Docket No. IX-FY91-22, to StarKist for violations of its NPDES permit interim effluent limitations for nitrogen and phosphorus. The order required StarKist to install all necessary equipment and implement high strength waste segregation by July 31, 1990. The order also established new interim effluent limitations for nitrogen and phosphorus, required a three month intensive monitoring program, commencement of an engineering feasibility study for alternatives to comply with NPDES permit final effluent limitations, select an alternative, and comply with NPDES permit final effluent limitations.

The American Samoa Government also issued an consent decree to StarKist in August, 1990. The requirements of the American Samoa consent decree and EPA administrative order are the same with the exception that the American Samoa consent decree required a penalty payment for past violations of water quality standards and includes stipulated penalties in the event of violations of the interim effluent limitations and the compliance schedule.

During the site inspection the wastewater treatment facility appeared to be operating satisfactory. The dissolve air flotation (DAF) treatment unit appeared in satisfactory condition. However, a close inspection of the DAF unit was not performed due to the facility's practice of spraying a masking agent over the DAF unit for odor control. StarKist indicated that they performed an operation and maintenance inspection on the DAF unit in June/July, 1990 and corrected any problems which were discovered.

High strength waste segregation was being implemented as required by the order. StarKist is utilizing a 250,000 gallon storage tank for its high strength wastes (press water and pre-cooker juice). The high strength waste streams are metered to determine volumes. The DAF sludge is stored in a separate storage tank. The high strength waste segregation is performed by the storage and ultimate disposal, by barging, of the high strength wastes along with the DAF sludge to the ocean dumping site.

StarKist indicated during the inspection that they had completed the intensive monitoring of the high strength wastes for October and submitted data to EPA. StarKist was required to perform a three month (August-October) intensive monitoring program

of the high strength wastes. Based upon the review of the intensive monitoring data EPA would consider adjustment of the effluent limitations for nitrogen and phosphorus. During the three month intensive monitoring period there were two violations of the interim effluent limitations. A monthly average violation in August for phosphorus and daily maximum violation in October for nitrogen were reported.

Although there were two violations of the interim effluent limitations during the three month intensive monitoring program it was determined that adjustments to the interim effluent limitations for nitrogen and phosphorus were not necessary and limitations would remain the same as presented in the AO. However, StarKist has reported monthly average violations of interim effluent limitations for nitrogen in March, April and May, 1991. There have also been two each daily maximum violations for nitrogen in March and April, 1991.

As part of the AO requirements StarKist is to complete an engineering feasibility study to assess the viable alternatives to achieve compliance with its NPDES permit final effluent limits. At the time of the inspection StarKist indicated that they had contracted with CH2M Hill for the feasibility study and expected to complete and submit the study as required in March, 1991. EPA received the engineering study in March, 1991. Based on discussions and review of the StarKist and Samoa Packing feasibility studies it appears that a joint outfall for the canneries will be the recommended alternative.

During the inspection the stormwater monitoring was discussed. StarKist has two discharge points, 001 and 002. The stormwater discharge is designated as 002 and has not been monitored in accordance with its NPDES permit requirements. StarKist indicated that the stormwater pipe discharged under the wharf and may be difficult to monitor. However, StarKist indicated that they would assess the situation and develop a monitoring point to comply with the NPDES permit. StarKist has started monitoring and reporting stormwater data (temperature, turbidity, and O&G) as of March, 1991.

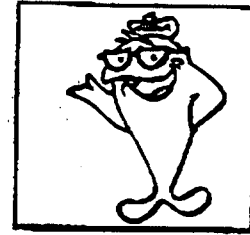
Stormwater at the facility is collected a by system of ground catchments and routed to the stormwater discharge pipe which discharges under the wharf. There are number of stormwater catchments and it is difficult to verify exactly where each one leads due to the layout and age of the facility.

Inspection of the effluent flow appeared normal for the tuna cannery. Flow, temperature, and pH are continuously monitored at the effluent station just prior to discharge. Flow, temperature, and pH instrumentation is calibrated in-house on a two week schedule according to StarKist representatives.

StarKist indicated that efforts were in progress to install a cooling water tower to control effluent temperatures. Effluent limits for temperature will change from 90F to 85F in March, 1991. StarKist indicated that they anticipate installation of the cooling water tower by early March, 1991 to comply with the new temperature limits of its permit.

To Brenda
5/12

StarKist Seafood Company
Facsimile Transmittal



DATE: 11 May, 1992
TO: Pat Young
FROM: Norman Wei
FAX Number: (415) 744-1604

Number of pages including cover sheet: 4

Our Fax Number is (310) 590-3882

**If you have not received all pages of this transmittal
please call Norman Wei at (310) 590-3873**

=====

Special Messages:

Pat:

Here are several pages of literature describing the Total Nitrogen Analyzer manufactured by ANTEK. They also show the equipment's close correlation with EPA approved methods. The manufacturer's rep told me that this equipment is ASTM approved.

Please let me know what you think of it. Thanks

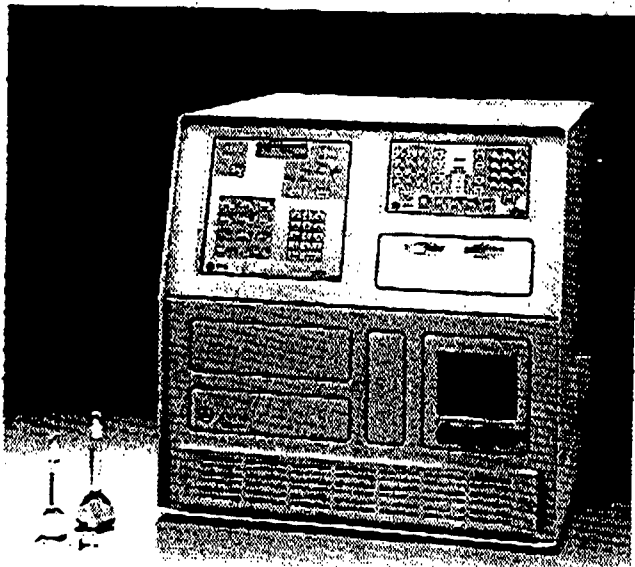
Norman



Antek Advisor

A publication of ANTEK Instruments, Inc.

Fall 1989/Winter 1990



On-line Waste Water Analyzer

ANTEK INDUSTRIAL INSTRUMENTS was formed in 1989 to meet the increased demand for "on-line" process control analysis. The Total Nitrogen On-line Analyzer, Model 6030, for analysis of water and waste water streams, was an immediate success.

Designed to sample a water stream every four minutes, the system's analysis time is 30 to 60 seconds from sample injection to result. The system's configuration isolates the electronics section from the furnace section, while a reliable microprocessor controls the timed events, detector parameters, pyrofurnace, photomultiplier voltage and temperature control.

Sample introduction is by means of a pressurized sample line or via an aspirator system. To minimize lag time, the sample is continuously flowed through the sampling system and then injected into a high temperature furnace via an injection system.

The Model 6030 employs the same proven and industry leading detection methodology as ANTEK's laboratory nitrogen analyzers. The sample is combusted in an oxygen atmosphere where all the bound nitrogen is converted to nitric oxide (NO). The NO is then reacted with ozone (produced in the unit) to form excited nitrogen dioxide (NO₂*). As these excited molecules decay, light is emitted which is sensed by a photomultiplier tube.

The analyzer runs a calibration every 12 hours. This process is automated to insure accurate analysis results. Detection limits are from 1 ppm to 1 percent. An Auto-Dilutor is available to accommodate waste water streams with high concentrations of nitrogen.

The analyzer is enclosed for NEMA 4 or for Class I, Division 1 and 2 locations. Optional SULFUR ANALYSIS can be added to the system at any time, quickly and easily, on-site if necessary. One sample system, one injection, two results.

For more information on how ANTEK can meet your process/on-line analytical needs, please call our Technical Sales Department in the U.S.A. at (800) 365-2143, or in F.R. Germany at 0203-74325.

#

#

→ New Nitrogen & Sulfur Analyzers

ANTEK'S new 7000 Series Nitrogen & Sulfur Analyzers utilize the proven technology of Pyro-fluorescent™ Sulfur Analysis and Pyro-chemiluminescent™ Nitrogen Analysis. The 7000 Series' unique modular design employs separate, easy-to-install modules for sulfur detection and nitrogen detection. Buy one detector and add the other at any time. Systems are available for total nitrogen determinations, total sulfur determinations, or for both nitrogen and sulfur determinations simultaneously (One injection - two results).

The 7000 Series Analyzers perform total nitrogen determinations and total sulfur determinations in gas, liquid, and solid samples. For most samples, results appear in seconds. The operator selects desired units of measure: parts per million, nanograms, percent, or other. The instrument plots a single point calibration curve based on one standard or a multipoint calibration curve based on up to 5 standards. The systems have a range of detection from low ppb to 2% total nitrogen, and from low ppb to 40% total sulfur.

The 7000 Series Elemental Analyzers are microprocessor controlled. Features include methods storage, timed events, and front panel control of photomultiplier tube temperature and voltage. All front panel functions can be operated as timed events. Touch pads actuate the operating parameters for easy control of all analyses.

Data for the twenty-nine samples is shown in Fig. 1. Linear regression analysis applied to the data yielded a line with the general equation:

$$\text{TKN} + \text{NO}_3\text{N} \\ = 0.998 \text{ Antek TN} - 15.82$$

where 0.998 is the slope and -15.82 the corresponding intercept. The correlation coefficient for the data was 0.989 and yields a high degree of confidence in instrumental results for nitrogen analyses.

In addition, there are many occasions where the NO_x content of stack and process gas is required. The EPA reference Method 7 is used for official monitoring data. However, this method requires twenty-four hours to complete and must be run in triplicate for quality assurance. For these analyses, an Antek Model 703B was fitted with a Valco six-port sampling valve using a 1 ml 304ss sample loop. Analytical data obtained from Method 7 analysis was compared by averaging three replicates. Antek data were generated by collecting samples through a small pump into a Tedlar 20L bag. Samples were then compared to NBS traceable standards prepared in treated aluminum cylinders. Raw data are shown and correlated in Fig. 2. A correlation coefficient of 0.987 was obtained by simple linear regression analysis. This method of rapid NO_x analysis has proven to be invaluable in stack gas monitoring. Determinations can typically be made in ten minutes or less depending upon the sampling requirements. The method has also been used in the process unit to evaluate heat exchangers in the Nitric Acid plant for leaks. This usually entails determining NO_x changes across the vessel of 5-10 ppm, which has been easily determined.

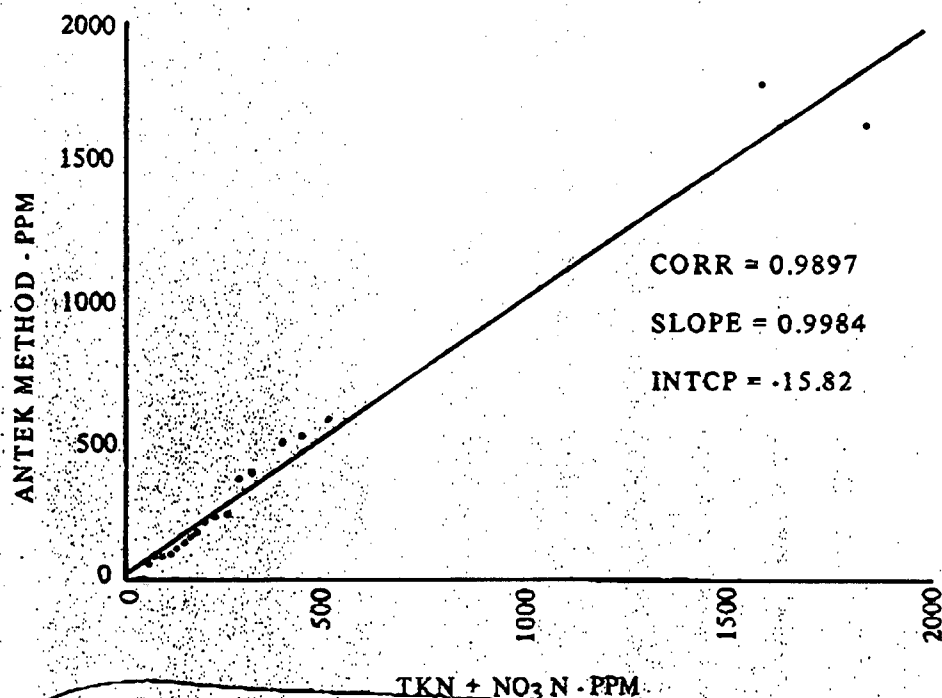


Fig. 1. Comparison of the Nitrogen Values Obtained by the Antek Instrument vs. Total Kjeldahl Nitrogen + Nitrate Nitrogen

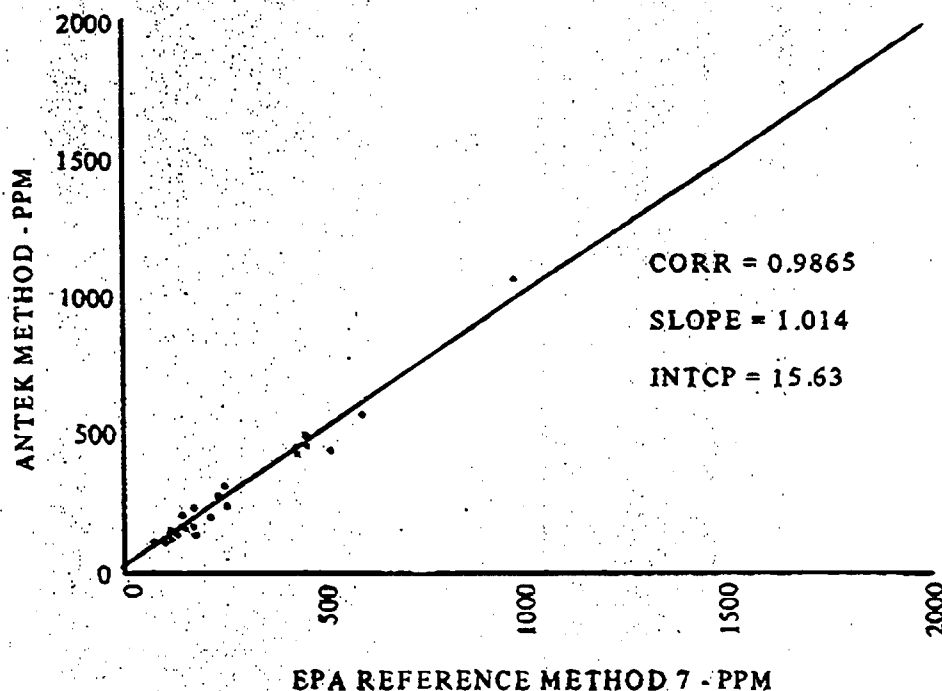


Fig. 2. Comparison of the Nitrogen Values Obtained by the Antek Instrumental Method vs. EPA Reference Method 7



Application News

VOL. 1, NO. 2,

ADVANCES IN INSTRUMENTAL ANALYSIS

OCTOBER 1981



Seen here is William M. Snodgrass who received his B. S. from Louisiana State University in 1974. He has been employed by Vulcan Materials Company and American Cyanamid where he worked in quality control, environmental and analytical development. Mr. Snodgrass is presently employed by Allied Corporation as supervisor of quality control. His primary interest is the development of instrumental procedures.

Determination of Nitrogen in Wastewater and Process Gases

W. M. Snodgrass, Allied Corporation, Geismar, LA. 70734

Allied Chemical Company Laboratories in Geismar, Louisiana utilize two Antek Model 703B units for Nitrogen analysis in wastewater and process gases.

The fertilizer laboratory routinely analyzed samples containing ammonia, nitrate, and organic nitrogen collected from composite samplers located to monitor nitrogen bearing waters which could impact on National Pollutant Discharge Elim-

ination System (NPDES) requirements. Using classical wet chemical procedures consumed far too much time if corrective action was warranted. The use of the Antek analyzer has proven to be a critical part of effective water management due to its ability to provide rapid and accurate total nitrogen values.

Since the pyro-chemiluminescence method measures total combined nitrogen, a study was con-

ducted to verify the correlation of Antek analyses with the combined results from total Kjeldahl nitrogen, which measures ammoniacal and organic species, and nitrate nitrogen obtained from the EPA Method 352.1 using Brucine-Sulfanilic Acid as a color developing agent. Analyses were performed on actual plant samples which were split and analyzed by the respective procedures.

Continued on page 2

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- Determination of Nitrogen in Wastewater and Process Gases
W. M. Snodgrass
- Interpretation of Thermograms from Chemiluminescent Nitrogen Detectors
M. W. Polczynski and H. A. Hernandez
- Techniques for the Determination of Nitrogen at Sub-ppm Levels
T.J. Beugelsdijk
- What's New?

Editor:
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OPINAP FAX TRANSMISSION

**USEPA Region 9
Office of Pacific Island and Native American Programs (E-4)
75 Hawthorne Street
San Francisco, CA 94105**

**FAX NO: (415) 744-1604
VERIFICATION NO: (415) 744-1599**

DATE: 10/8/92

PAGES (incl. cover): 1

TO: Lisa Brown

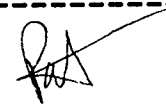
ORGANIZATION: Samoa Packing Company - Laboratory

FAX NO: 684/644-2290

PHONE NO:

SUBJECT: TRC Test Method

**FROM: Pat Young, American Samoa Program Manager
USEPA Region 9
Phone: (415) 744-1591**



I relayed your questions to Peter Husby of our Laboratory Support Services Section (I believe you met him when he inspected the cannery's lab). Here is his reply. Please feel free to contact Peter at 415/744-1488 if you have further questions.

The problem with color disk comparators and colorimetric methods in general is and I quote from the EPA test manual "Turbidity and color will essentially prevent the colorimetric analysis." The effluent at Samoa Packing has some of both - turbidity and color. The only chlorine method which is not significantly affected by turbidity and color is the amperometric titration method(EPA 330.1). Iodometric back titration method is recommended frequently for wastewater, but the amperometric endpoint would be better than the starch endpoint, because of the color/turbidity problem. High concentrations of organics (i.e. tuna waste) can also interfere with this endpoint - acidifying to pH 1 can reduce this effect.

Any questions, please call me at X-1488.

10/08/92

11:35

415 744 1604

US EPA

001

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	4548
CONNECTION TEL	2880116846442290PP
CONNECTION ID	
START TIME	10/08 11:35
USAGE TIME	00'52
PAGES	1
RESULT	OK

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

6154 Mission Gorge Road
(Mail: Suite 205/Enter: Suite 106)
San Diego, California 92120-1939
Telephone: (619) 265-5114



August 14, 1985

H. E. Sorlie, Director (Acting)
Department of Public Works
County of San Diego
Bldg. 2, 5555 Overland Ave.
San Diego, California 92123

Dear Mr. Sorlie:

ADOPTION OF ORDER NO. 85-73, AN ORDER FOR ISSUANCE OF A TIME SCHEDULE
FOR THE SAN ELIJO WATER POLLUTION CONTROL FACILITY, SAN DIEGO COUNTY

Enclosed is a copy of subject Order which was adopted by this Regional Board on July 29, 1985 to provide a time schedule for achieving compliance with Order No. 81-12. Order No. 85-73 requires the County of San Diego to submit by September 29, 1985 an engineering report regarding potential for wastewater bypass and overflow from the City of Escondido's Land Outfall due to capacity limitations in the San Elijo Ocean Outfall.

If you have any questions, please call Mr. David Barker at the above number.

Very truly yours,

DAVID T. BARKER
Senior Engineer

RM:gs

Enclosures

cc: Environmental Protection Agency
Permits and Pretreatment Section
San Francisco

Mr. Jack Hodges, Division of Water Quality
State Water Resources Control Board
Sacramento

Asaro & Keagy, Attorneys at Law
San Diego

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 85-73

AN ORDER FOR ISSUANCE OF
A TIME SCHEDULE FOR THE
SAN ELIJO WATER POLLUTION CONTROL FACILITY
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On June 1, 1981, this Regional Board adopted Order No. 81-12, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107999, *Waste Discharge Requirements for the San Elijo Water Pollution Control Facility, San Diego County.*

2. Provision D.12 of Order No. 81-12 states the following:

12. Bypass of Treatment Facilities

(a) Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass Not Exceeding Effluent Limitations.

The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operations. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice of Anticipated Bypass and Unanticipated Bypass.

- (1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, they shall submit prior notice, if possible, at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as described under Reporting Requirement 5.

5. Treated wastewater from the San Elijo Water Pollution Control Facility is discharged to a land section of the ocean outfall system used jointly by the City of Escondido. Flows from the Escondido Hale Avenue Treatment Facility in the land outfall are controlled by the San Elijo Water Pollution Control Facility by means of a pressure reducer located approximately 1000 feet downstream of the San Elijo Water Pollution Control Facility.
6. The County of San Diego reported in a letter dated August 8, 1984 that the flow regulator, noted in the above Finding No. 5, is a pressure reducer which prevents pressures in the ocean outfall downstream of the regulator from exceeding a predetermined limit (about 70 feet of head). When the pressure from the Escondido Land Outfall exceeds the pressure limit, an automatic valve regulates the Escondido wastewater flow to reduce downstream pressure. The County of San Diego also reported that the regulator is an integral part of the ocean outfall design and is necessary to prevent damage to the ocean outfall and prevent spills from the San Elijo treatment facility into San Elijo lagoon.
7. A series of manholes is contained in the portion of the Escondido land outfall designed to operate under gravity flow conditions. The first manhole in the gravity section upgradient of the pressure portion of the land outfall is identified as Manhole No. 75. In a letter dated June 14, 1985, Mr. Frank L. Asaro, an Attorney at Law representing the owner of the property where Manhole No. 75 is located, reported that there have been several instances where wastewater overflows from the manhole have occurred.
8. On May 3, 1984, Regional Board staff met with an engineering consultant of the City of Escondido at Manhole No. 75, noted in the above Finding No. 7. Staff noted that an asphalt slab had been constructed around the manhole to control overflows and provide erosion protection. In addition, the manhole cover was set on metal rods, enabling it to lift off during overflows and to return in place afterwards. The consultant informed staff that the asphalt slab and lift-off cover was installed by the City of Escondido in 1980, after a wastewater overflow had occurred.
9. In a letter dated June 27, 1985 the County of San Diego reported that on June 21, 1985 approximately 20,000 gallons of secondary treated effluent spilled from the Escondido land outfall at Manhole No. 75. As reported by the County, the spill was due to high peak flow resulting from the City of Escondido's drainage of an equalization tank and human error on the part of the County of San Diego in the operation of the flow regulator valve at the San Elijo Water Pollution Control Facility.
10. During a meeting on June 26, 1985 representatives of the City of Escondido and County of San Diego reported that with the use of the flow equalization tank at the Hale Avenue Wastewater Treatment Facility, flows in the Escondido Land Outfall should not cause overflows at Manhole No. 75 for at least the next five years.
11. The lift-off device at Manhole No. 75 and the flow regulator valve within the San Elijo Ocean Outfall constitutes a threatened violation of Provisions D.1, D.10 and D.12 of Order No. 81-12.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CEASE AND DESIST ORDER NO. 88-60 (6-6-88)

AN ORDER DIRECTING THE SAN ELIJO JOINT POWERS AUTHORITY
TO CEASE AND DESIST FROM VIOLATING OR THREATENING TO VIOLATE
WASTE DISCHARGE REQUIREMENTS FOR THE
SAN ELIJO WATER POLLUTION CONTROL FACILITY
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region
(hereinafter Regional Board), finds that:

1. On June 1, 1981, this Regional Board adopted Order No. 81-12 (NPDES No. CA0107999), *Waste Discharge Requirements for the San Elijo Water Pollution Control Facility, San Diego County*. Order No. 81-12, as amended by addenda Nos. 1 and 2 thereto, established waste discharge requirements for the discharge of up to 3.7 million gallons per day (MGD) of wastewater treated at the San Elijo Water Pollution Control Facility (SEWPCF) to the Pacific Ocean through the San Elijo Ocean Outfall. Order No. 81-12, as amended, required compliance with secondary treatment effluent limitations no later than July 1, 1988, pursuant to the Sections 301(b)(1)(B) and 301(i) of federal Clean Water Act (CWA), unless a modified NPDES permit was issued pursuant to Section 301(h) of the CWA prior to that date. Section 301(h) of the CWA provides for variances from the requirement for publicly owned treatment works to provide secondary treatment.
2. The SEWPCF is owned by the San Elijo Joint Powers Authority (SEJPA), which consists of the Solana Beach Sanitation District and the Cardiff Sanitation District. Since these sanitation districts were in unincorporated areas of the County of San Diego (County) until recently, the County Board of Supervisors acted as the Board of Directors for both sanitation districts. Consequently, the County was responsible for operation of the SEWPCF and for compliance with Order No. 81-12. On March 10, 1979, the County submitted an application to the United States Environmental Protection Agency (EPA) for a modified NPDES permit pursuant to Section 301(h) of the CWA. By letter dated March 6, 1981, EPA notified the County that review of the SEWPCF 301(h) application would be delayed pending completion of review of 301(h) applications for larger discharges. By letter dated October 4, 1983, the County agreed to a joint review of the SEWPCF 301(h) application with the 301(h) application of the City of Escondido. The City of Escondido also discharges treated wastewater through the San Elijo Ocean Outfall.

San Elijo WPCF
01-0125.02
or .01

3. On March 29, 1986, EPA issued a tentative decision to grant 301(h) variance for the SEWPCF. On October 16, 1985, this Regional Board adopted waste discharge requirements (Order No. 85-63), which included a 301(h) variance, for the SEWPCF. Amendments to Order No. 85-63 were adopted by this Regional Board on March 25, 1986. Order No. 85-63 as amended, was not to take effect until issued by EPA as an NPDES permit. On March 31, 1986, EPA issued a final decision to grant a 301(h) variance for the SEWPCF. However, since a request for an evidentiary hearing was filed, the effective date of the NPDES permit (i.e., this Regional Board's Order No. 85-63, as amended) incorporating the 301(h) variance was postponed pending resolution of that request. On June 24, 1986, the County Board of Supervisors voted to withdraw its 301(h) variance application. A County letter dated July 24, 1986 conveyed this decision to EPA. Consequently, the NPDES permit incorporating the 301(h) variance for the SEWPCF never took effect.
4. On July 1 and October 1, 1986, the City of Solana Beach and the City of Encinitas, respectively, were incorporated following votes by local residents. The boundaries of the Solana Beach Sanitation District essentially coincide with those of the City of Solana Beach. The governing board of the Solana Beach Sanitation District is now the City of Solana Beach city council. Virtually all of the Cardiff Sanitation District is now within the City of Encinitas. The governing board of the Cardiff Sanitation District is now the City of Encinitas city council. County of San Diego staff has continued to serve as staff for both sanitation districts and the San Elijo Joint Powers Authority on a contract basis.
5. Order No. 81-12 expired June 1, 1986, but was administratively extended pending permit renewal.
6. On June 6, 1988 this Regional Board adopted Order No. 88-21, (NPDES No. CA0107999) *Waste Discharge Requirements for the San Elijo Joint Powers Authority San Elijo Water Pollution Control Facility Discharge Through the San Elijo Ocean Outfall, San Diego County*. Order No. 88-21, superseded Order No. 81-12. Like Order No. 81-12, Order No. 88-21 requires compliance with secondary treatment effluent limitations no later than July 1, 1988, pursuant to Sections 301(b)(1)(B) and 301(i) of the CWA.
7. Discharge Specifications B.1 and B.2 of Order No. 88-21 contain effluent limitations which constitute the requirement for secondary treatment pursuant to the CWA.
8. Discharge Specification B.1 of Order No. 88-21 contains the following secondary treatment effluent limitations:

Parameter	Unit	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum
BOD ₅ @ 20°C	mg/L	30	45	50	50
Suspended Solids	mg/L	30	45	50	50
pH	pH Units -Within the limits of 6.0-9.0 at all times-				

9. Discharge Specification B.2 of Order No. 88-21 states the following:

The arithmetic mean of biochemical oxygen demand and total suspended solids values, by weight, for effluent samples collected in the period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same times during the same period.

10. The SEWPCF currently has an "advanced primary" (75% total suspended solids removal) treatment capacity of 3.7 MGD average dry-weather flowrate (ADWF). The SEWPCF has no secondary treatment facilities; primary sedimentation removal efficiency is enhanced by chemical addition. Planning for secondary treatment facilities is now in progress but the capacity of the new facilities has not yet been determined.
11. The SEWPCF is not now capable and will not be capable by July 1, 1988, of producing effluent that would meet the secondary treatment effluent limitations for biochemical oxygen demand and suspended solids established in Discharge Specifications B.1 and B.2 of Order No. 88-21.
12. Evidence from the SEWPCF self-monitoring reports and Regional Board staff inspection data indicate that the SEWPCF effluent complies with the effluent limitations of Order No. 88-21 except for the suspended solids and biochemical oxygen demand limitations.
13. This Order establishes interim effluent limitations for suspended solids and biochemical oxygen demand which are to be complied with until compliance with secondary treatment effluent limitations for suspended solids and biochemical oxygen demand is achieved in accordance with the time schedule established by this Order. The interim effluent limitation for suspended solids established in this Order is based on the 75 percent suspended solid removal requirement of Table A of the *Comprehensive Water Quality Control Plan, Ocean Waters of California, 1983* (Ocean Plan). The Ocean Plan does not establish effluent limitations for biochemical oxygen demand. The interim effluent limitation for biochemical oxygen demand established in this order was determined on the basis of SEWPCF effluent data. In accordance with a recommendation from EPA, the 30-day average effluent limitation for biochemical oxygen demand (5-day, 20°C) is the rounded off monthly average concentration not exceeded 95% of the time during the period November 1983 through December 1987. The 7-day

average and the daily and instantaneous maximum limitations are respectively, 1.5 and 1.67 times greater than the 30-day average limitations. These ratios are the same as in Finding 7 of this Order.

14. Because the SEWPCF is not now complying with and will not comply with the secondary treatment requirements specified in Order No. 88-21 by July 1, 1988, this Order establishes a time schedule for compliance with secondary treatment effluent limitations established in Order No. 88-21.
15. Regional Board staff has met with representatives of the SEJPA and by letter dated December 1, 1987, has requested that SEJPA submit an expeditious but reasonable schedule for the planning, design, construction and start-up of secondary treatment facilities for the entire wastewater flow at the SEWPCF. By letter dated December 9, 1987, SEJPA submitted a proposed schedule. The time schedule contained in this Order is based on the schedule submitted by SEJPA.

16. California Water Code Section 13301 states:

When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation or waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302.

17. On June 6, 1988, in the Encinitas City Council Chamber 535 Encinitas Boulevard, Suite 100, Encinitas, California, after due notice to the SEJPA and all other interested persons, the Regional Board conducted a hearing at which SEJPA representatives had the opportunity to appear before the Regional Board and evidence was discussed concerning the aforementioned noncompliance with Order No. 88-21, and the establishment of a compliance time schedule.
18. This enforcement action is exempt from the provisions of the California Environmental Quality Act in accordance with the California Administrative Code, Title 14, Section 15321.

IT IS HEREBY ORDERED, That pursuant to California Water Code Section 13301:

1. The San Elijo Joint Powers Authority (SEJPA) shall cease and desist from violating and threatening to violate the biochemical oxygen demand and suspended solids requirements of Discharge Specifications B.1 and B.2, of Order No. 88-21 NPDES No. CA0107999, in accordance with the time schedule in paragraph 2, below.

Order No. 88-60

2. Compliance by the SEJPA with the requirements of Discharge Specifications B.1 and B.2 of Order No. 88-21 shall be achieved in accordance with the following time schedule:

Task	Compliance Date	Report of Compliance Date
1. Certify EIR/EIS	7/1/88	7/15/88
2. Award contract for design work/begin design	7/6/88	7/20/88
3. Complete final design	10/1/89	10/15/89
4. Complete acquisition of all necessary permits, approvals, etc.	10/1/89	10/15/89
5. Solicit bids for construction work	10/1/89	10/15/89
6. Award contract for construction work/begin construction	2/1/90	2/15/89
7. Complete construction/begin startup operations	8/1/91	8/15/91
8. Complete startup operations/achieve full compliance with secondary treatment requirements of Order No. 88-21	11/1/91	11/15/91

On or before each compliance report date, SEJPA shall submit to the Regional Board a report of compliance or noncompliance with the specific task. If noncompliance is being reported, the reasons for such noncompliance, as well as the anticipated date of compliance, shall be identified. SEJPA shall notify the Regional Board by letter upon return to compliance with the time schedule.

3. The SEJPA shall submit status reports detailing the progress of the compliance work on a quarterly basis. The quarterly reports are due 15 days following the end of the quarterly periods. The quarterly periods are as follows: January through March; April through June; July through September; and October through December.
4. Until compliance with the secondary treatment effluent limitations of Order No. 88-21 for suspended solids and biochemical oxygen demand is achieved, the SEJPA shall comply with the following effluent limitations for suspended solids and biochemical oxygen demand:

Parameter	Unit	30-Day Average	7-Day Average	Daily Maximum	Instantaneous Maximum
BOD ₅ @ 20°C	mg/L	175	260	290	290

Suspended
Solids

On a 30-day average basis, if the average influent suspended solids concentration is 240 mg/L or less, the effluent suspended solids concentration limit shall be 60 mg/L. At all other times, the 30-day average effluent suspended solids concentration limit shall be 25% of the 30-day average influent suspended solids concentration.

3. This Order does not relieve the SLJPA of its obligation to comply at all times with effluent limitations established by Order No. 88-21 for all parameters other than suspended solids and biochemical oxygen demand.

I, Ladin H. Delaney, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 8, 1988.

Ladin H. Delaney

Ladin H. Delaney
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

7/2
copy
CAN

ORDER NO. 89-100

NPDES NO. CA0038008

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF LIVERMORE
LIVERMORE
ALAMEDA COUNTY

AND

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The City of Livermore, Livermore, by application dated January 30, 1989, has submitted a report of waste discharge from reissuance of NPDES Permit No. CA0038008.
2. The City presently discharges an average dry weather flow of 5.0 million gallons per day (mgd) flow from its secondary plant which has a dry weather design capacity of 6.3 mgd. Existing treatment consists of pre-aeration and grit removal, primary sedimentation using clarifiers, activated sludge, secondary clarification, and chlorination. The plant has an emergency 10 mg holding pond. Sludge is anaerobically digested, dewatered using belt filters, and trucked for disposal to a waste disposal site. This facility treats domestic and industrial wastewaters from the City of Livermore service area.

The City plans to expand the capacity of its sewage treatment plant to 8.5 mgd. The first stage of the project will expand aeration units and will be completed in January 1990, increasing capacity to 7.3 mgd. The second stage involves several treatment units and will be completed in mid-1992. The expansion will allow the City to use its full capacity allotment in the effluent transport system.

3. Approximately 89 percent (4.5 mgd) of the present annual flow is discharged to the Livermore-Amador Valley Water Management Agency (LAVWMA) export system. The remaining 11 percent (or 0.5 mgd) is further treated and used for irrigation of the Los Positas Golf Course, landscape irrigation at the Livermore Airport and within the treatment plant, and landscape along sections of Interstate Highway 580. These reclamation activities are regulated under separate waste discharge requirements.
4. The City transports treated wastewater to the LAVWMA export pump station where it combines with the Dublin San Ramon Services District's treated wastewater. The combined wastewaters flow to two flow-equalization basins, receive additional chlorination and are pumped via LAVWMA's pipeline to the East Bay Discharge Authority's (EBDA) system. EBDA is responsible for the combined transport, dechlorination, and discharge of LAVWMA's treated wastewater by contractual agreement and of treated wastewaters from EBDA's member agencies. The discharge point is a deepwater diffuser located 23.5 feet below the surface (at MLLW) in Lower San Francisco Bay west of the Oakland Airport at

longitude 122 18' west latitude 37 42' north. A diagram showing LAVWMA's flow scheme is included in the Order.

5. LAVWMA is a joint powers agency created in 1974 for wastewater management planning for the service areas of Livermore, Pleasanton, and Dublin San Ramon Services District. By contractual agreement, the Dublin San Ramon Services District is responsible for operating and maintaining LAVWMA's export pump station and pipeline facilities and for performing and submitting the self-monitoring requirements for the LAVWMA facilities.
6. Both EBDA and LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities.

Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPA, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the Board at the individual treatment plants, except residual chlorine, for which EBDA will be responsible.

The LAVWMA JEPA limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with Board requirements. The City and LAVWMA will be referred to hereafter as the discharger.

7. The discharger is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 84-32, which allows discharge into Lower San Francisco Bay of treated wastewater from the City. Separate waste discharge requirements (NPDES Permits) for Dublin San Ramon Services District will be reissued at the same time.
8. LAVWMA's export pump station can export up to 21.0 mgd of treated wastewater, or 1.3 mgd more than its contracted capacity of 19.7 mgd in the EBDA system. LAVWMA is allowed to discharge up to 1.3 mgd of treated wastewater to San Lorenzo Creek during peak wet weather periods pursuant to a separate Board Order (NPDES Permit No. CA0030679).
9. The Board amended its Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The Basin Plan contains water quality objectives for Lower San Francisco Bay and contiguous waters.
10. The existing and potential beneficial uses of Lower San Francisco Bay and contiguous water bodies are:

- Water contact and non-contact recreation
- Wildlife habitat
- Preservation of rare and endangered habitat
- Estuarine habitat
- Fish migration and spawning
- Industrial service and process supply
- Shellfish harvesting
- Navigation
- Commercial and sport fishing

11. Disposal of the discharger's treated wastewater into the EBDA system outside of the Livermore Amador Valley complies with Basin Plan surface water objectives for Alameda Creek, ground water objectives for the Niles Cone groundwater basin, and discharge prohibitions for these objectives.
12. An Operations and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
13. This Order serves as an NPDES Permit, reissuance of which is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
14. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant or from any of the joint facilities or individual member collection system and pump stations tributary to the treatment plant is prohibited.
2. The average dry weather flow shall not exceed 6.3 mgd. Actual average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.

This flow limit will be raised to 8.5 mgd if the City demonstrates to the Executive Officer's satisfaction that the plant can reliably comply with permit requirements at this higher capacity.
3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.
4. Discharge of treated wastewaters to any surface water other than Lower San Francisco Bay through the LAVWMA transmission line and EBDA interceptor and deepwater outfall is prohibited.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

Constituents	Units	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
a. Settleable Matter	ml/L-hr	0.1	-	-	0.2
b. Carbonaceous BOD	mg/L	25	40	-	-
c. Total Suspended Solids	mg/L	30	45	-	-
d. Oil and Grease	mg/L	10	-	20	-

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected approximately the same times during the same period (i.e. 85 percent removal).

3. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based on the ten most recent consecutive samples. Samples may be dechlorinated in the laboratory prior to testing. This limit may be met at the EBDA outfall.

4. Representative samples of the effluent shall not exceed the following limits (1):

Constituent	Unit	Daily Average
Arsenic	µg/L	200
Cadmium	µg/L	30
Chromium(VI) (4)	µg/L	110
Copper	µg/L	200
Cyanide	µg/L	25
Lead	µg/L	56
Mercury	µg/L	1
Nickel	µg/L	71
Silver	µg/L	23
Zinc	µg/L	580
Phenols	µg/L	500
PAHs ⁽²⁾	µg/L	150
Selenium ⁽³⁾	µg/L	-

Notes: (1) These limits are intended to be achieved through secondary treatment, source control, and application of pretreatment standards by each EBDA member.

(2) Polynuclear aromatic hydrocarbons

(3) Selenium limit to be established.

(4) Dischargers may meet this limit as total chromium.

5. The median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters. Any single sample shall not exceed 10,000 MPN/100 ml.

C. Sludge Storage Requirements

1. The discharge of sewage shall not cause waste material to be in a position where it is, or can be carried from the sludge storage site and deposited in the waters of the state.
2. Sludge storage sites shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the storage site. Adequate protection is defined as protection from at least a 100-year storm.
3. The discharge to a sludge storage site of waste other than sewage sludge produced by the discharger facility is prohibited.
4. The storage of sludge shall not cause the degradation of groundwaters.
5. The Executive Officer may require the discharger to prepare a hydrogeologic report that estimates the threat to waters of the State from sewage sludge storage sites.
6. The Board may amend this permit prior to the expiration date, if changes occur in applicable state and federal sludge regulations.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-32. Order No. 84-32 is hereby rescinded.
2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall apply:

Mass Emission Limit in lbs/day = Concentration limit in mg/l x 8.34 x Actual Flow in mgd over the time interval for which the limit applies.

3. The discharger shall comply with all sections of this Order immediately upon adoption.
4. Neither the collection, treatment, storage, transmission, or discharge facilities shall create a nuisance as defined in the California Water Code.
5. The discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Board by April 15 of each year.
6. The discharger shall annually review and update its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

7. The discharger shall implement and enforce its approved pretreatment program in accordance with Board Order No. 84-60 and its amendments thereafter. The discharger's responsibilities include, but are not limited to:
 - a. Enforcement of National Pretreatment Standards (e.g. prohibited discharges, Categorical Standards, local limits) in accordance with 40 CFR 403.5 and Section 307(b) and (c) of the Clean Water Act.
 - b. Implementation of the pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment Regulations (40 CFR 403) and its approved pretreatment program.
 - c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 84-60 and its amendments thereafter.
8. The discharger shall comply with the attached Self-Monitoring Program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986.
10. This Order expires June 21, 1994. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as applicable for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

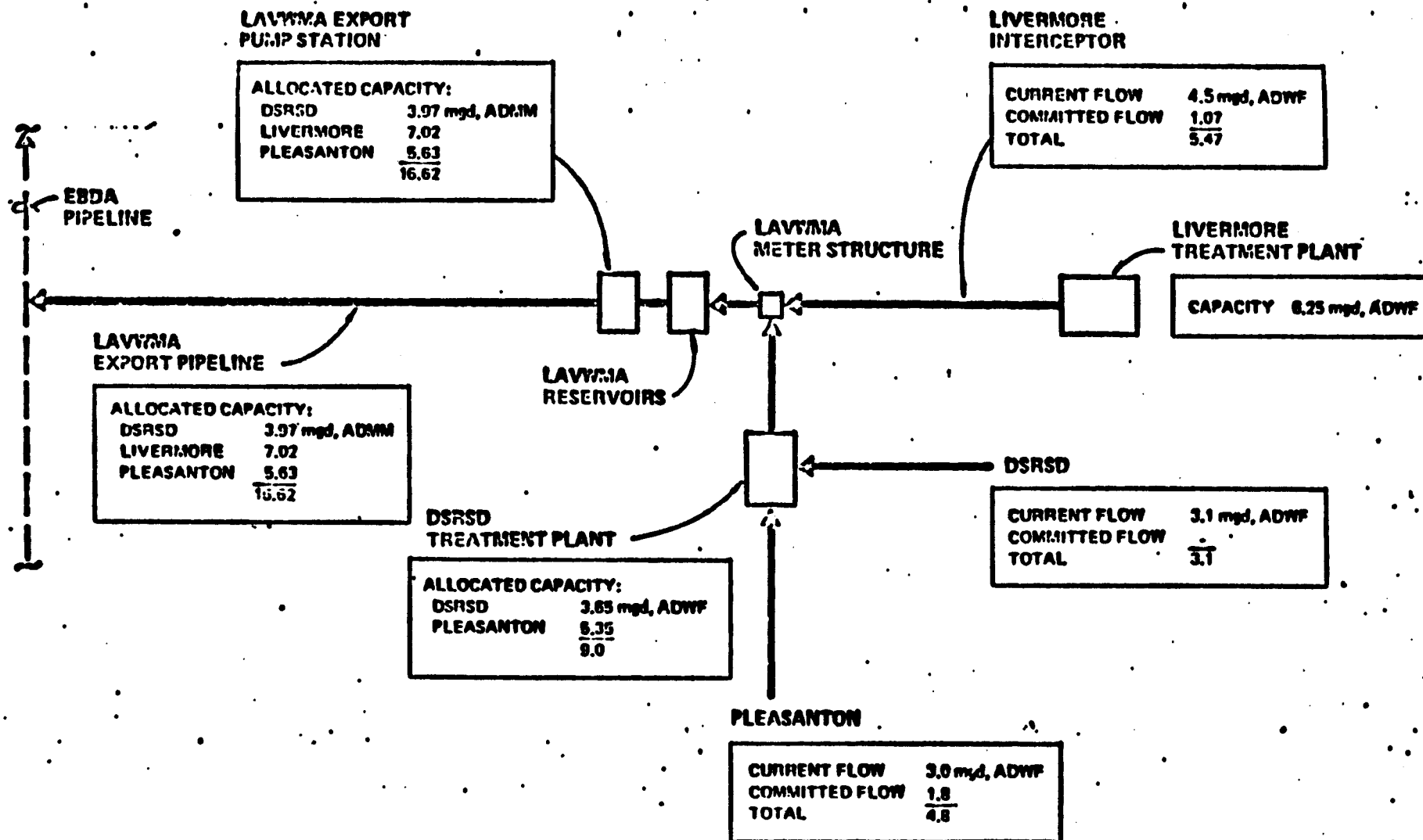
I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on 21 June, 1989.



Steven R. Ritchie
Executive Officer

Attachments:

LAVWMA Flow Schematic
Standard Provisions and Reporting Requirements, December 1986
Self-Monitoring Program



LAVWMA FLOW SCHEMATIC

(from LAVWMA Preliminary Report for Wastewater Management Evaluation, June 1993)



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM
FOR
CITY OF LIVERMORE
AND
LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY**

NPDES NO. CA0038008

ORDER NO. 89-100

**CONSISTING OF
PART A, DATED DECEMBER 1986
AND PART B**

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Station	Description
A-1	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment or sidestream.

B. EFFLUENT

Station	Description
E-1	At any point in the treatment plant facilities at which adequate disinfection has taken place and just prior to where the individual facility transfers control of its effluent to LAVWMA facilities.

C. LAND OBSERVATIONS (TREATMENT PLANT)

Station	Description
P-1 through P-n	Located at the corners and midpoints of the perimeter fenceline surrounding the discharger's treatment facilities (A sketch showing the locations of these stations will accompany each report).

D. OVERFLOWS AND BYPASSES (TREATMENT PLANT, COLLECTION SYSTEMS, LAVWMA EXPORT SYSTEM)

Station	Description
O-1 through O-n	Bypass or overflows from manholes, pump stations, interceptor, or collection system or holding ponds.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-100.

2. has been ordered by the Regional Board on 21 June, 1989.

3. May be revised pursuant to CFR 122.36 or by the Regional Board.


Steven R. Ritchie
Executive Officer

Attachment:
Table I

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1) (7)

SAMPLING STATION	A-1	E-1	E-1	E-1	All P Sta.	All O Sta.
TYPE OF SAMPLE	C-24	G (3)	C-24	Cont.	0	0
Flow Rate (mgd)	D			D		
CBOD, 5-day, 20 C (mg/L & kg/day) (2)	5/W		5/W			
Chlorine Residual & Dosage (mg/L & kg/day) (6)		H or Cont.				
Settleable Matter (ml/hr. & cu.ft./day)		D				
Total Suspended Matter (mg/L & kg/day) (2)	5/W		5/W			
Oil and Grease (mg/L & kg/day) (3)		2/M				
Coliform (total or fecal) (MPN/100 ml) per req't		3/W				
Fish toxicity-96 hr. Surv'l in undiluted waste			2/M (4)			
Ammonia Nitrogen (mg/L & kg/day)			M			
Nitrate Nitrogen (mg/L & kg/day)						
Nitrite Nitrogen (mg/L & kg/day)						
Total Organic Nitrogen (mg/L & kg/day)						
Total Phosphate (mg/L & kg/day)						
Turbidity (Jackson Turbidity Units)						
pH (units)		D				
Dissolved Oxygen mg/L & % saturation						
Temperature (C)		D				
Apparent Color (color units)						
Secchi Disc (Inches or cm.)						
Sulfides (if DO < 5.0 mg/L) Total & Dissolved (mg/L)						
Arsenic (mg/L & kg/day)			M (5)			
Cadmium (mg/L & kg/day)			M (5)			

SAMPLING STATION	A-1		E-1		All P Sta.	All O Sta.
TYPE OF SAMPLE	C-24	G (3)	C-24	Cont.	—0—	0
Chromium VI (mg/L & kg/day)			M (5)			
Cyanide (mg/L & kg/day)			M (5)			
Silver (mg/L & kg/day)			M (5)			
Lead (mg/L & kg/day)			M (5)			
Mercury (mg/L & kg/day)			M (5)			
Nickel (mg/L & kg/day)			M (5)			
Zinc (mg/L & kg/day)			M (5)			
Selenium (mg/L & kg/day)			M (5)			
Phenolic Compounds (mg/L & kg/day)			M (5)			
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/L & kg/day)			M (5)			
All Applicable Standard Observations		D			2/W	E

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
 C-24 = 24 hour composite sample
 C-X = X hour composite sample
 (used when discharge does not
 continue for 24 hour period)
 Cont. = continuous sampling
 DI = depth-integrated sample
 BS = bottom sediment sample
 O = observation

FREQUENCY OF SAMPLING

E = each occurrence
 H = once each hour
 D = once each day
 W = once each week
 M = once each month
 Y = once each year

2H = every 2 hours
 2D = every 2 days
 2W = every 2 weeks
 3M = every 3 months

TYPES OF STATIONS

I = intake and/or water supply stations
 A = treatment facility influent stations
 E = waste effluent stations
 C = receiving water stations
 P = treatment facilities perimeter stations
 L = basin and/or pond levee stations
 B = bottom sediment stations
 G = groundwater stations

2/H = twice per hour
 2/W = 2 days per week
 5/W = 5 days per week
 2/M = 2 days per month
 2/Y = once in March and once in September
 Q = quarterly, once in March, June, Sept., and December

Cont = continuous

NOTES FOR TABLE 1

1. During any day when bypassing occurs from any treatment unit(s) in the plant or to the emergency outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:

- a. Composite sample for BOD and Total Suspended Solids.
- b. Grab samples for Total Coliform, Settleable Matter, and Oil and Grease.
- c. Continuous monitoring of flow.
- d. Continuous or every two hour monitoring of chlorine residual.

The above requirement will not apply if a portion of the plant's flow bypasses the secondary treatment unit during peak wet weather periods in order to prevent solids washout.

2. Percent removal (effluent vs. influent) shall also be reported.
3. Grab samples shall be taken on day(s) of composite sampling.
4. Fish toxicity test compliance shall be demonstrated in the EBDA combined outfall. Compliance bioassays shall be performed using two fish species in parallel flow through bioassay tests. One shall be the three-spine stickleback and the other shall be the fathead minnow. Chlorinated samples may be used following dechlorination.

In the event that a fish toxicity violation is detected, the discharger shall also perform toxicity tests at the individual treatment plant until compliance is achieved. The individual plants may use static renewal tests in lieu of flow through tests.

5. If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples. The Executive Officer may reduce basic sampling frequency after one year if lesser frequencies will provide statistically valid results.
6. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation.
7. Monthly sampling dates and approximate times shall coincide with receiving water monitoring conducted by EBDA.
8. Sludge disposal shall be reported monthly. Daily records shall be kept of the quantity (cu. yds. or cu. ft.) and solids content (%) of dewatered sludge disposed of and the location of disposal.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

TENTATIVE ORDER

NPDES NO. CA0037869

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

**EAST BAY DISCHARGERS AUTHORITY
CITY OF HAYWARD
CITY OF SAN LEANDRO
ORO LOMA SANITARY DISTRICT
UNION SANITARY DISTRICT**

AND

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

- 1. The East Bay Dischargers Authority (EBDA), by application dated December 1, 1988, on behalf of itself and its member agencies above, has submitted a report of waste discharge for reissuance of NPDES Permit No. CA0037869 to discharge combined wastes through a common outfall under the National Pollutant Discharge Elimination System (NPDES).**
- 2. The Livermore-Amador Valley Water Management Agency (LAVWMA) member agencies have also applied for waste discharge requirements and renewal of NPDES Permits to discharge wastes through the EBDA outfall. EBDA and its member agencies, and LAVWMA are hereinafter collectively and individually referred to as dischargers. These waste discharge requirements are primarily for regulation of EBDA and its member agencies and the operation of the EBDA joint outfall facilities. Separate effluent waste discharge requirements have been adopted by the Board for the City of Livermore (Order No. , NPDES No. CA00378006) and Dublin-San Ramon Services District (Order No. 89-, NPDES No. CA0037613).**
- 3. Both EBDA and LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities. LAVWMA will transport effluent from its member agencies to the EBDA system in its transmission, flow-equalization, chlorination, and pumping facilities. By contractual agreement, EBDA will transport LAVWMA treated wastewater jointly with the treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west to the Oakland Airport at longitude 122 18' west, latitude 37 42' north. The outfall's diffuser is located 30,000 feet from shore; it discharges 23.5 feet below the surface at (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 50% of the time.**

4. All the EBDA member agencies currently operate, and will continue to operate, their own collection and treatment facilities.
5. The existing and proposed waste discharge volumes are as follows:

Agency	Actual 1987 ADWF ⁽¹⁾	Design Existing ADWF	Capacity Proposed ADWF	Peak WWF ⁽⁴⁾
EBDA				
San Leandro	4.6	7.6	7.6	22.3
Oro Loma Sanitary District	14.0	20.0	20.0	69.2
Hayward ⁽²⁾	12.4	13.1	16.5	35.0
Union Sanitary District ⁽²⁾	22.9	19.7	30.0	42.9
Subtotal	53.9	60.4	74.1	169.4
LAVWMA	12.0	15.3	20.0	19.7⁽⁵⁾
Totals	65.9	75.7	97.1	189.1

NOTES: (1) Average Dry Weather Flow (ADWF); All units in million gallons per day (mgd).

(2) Hayward and Union Sanitary Districts are in the process of documenting additional capacity already provided.

(3) Portions of the treated effluent from the member agencies are used for reclamation and marsh enhancement. These activities are regulated separately by the Board.

(4) Wet Weather Flow (WWF); Sum does not equal parts due to timing of peaks. LAVWMA is authorized to discharge a portion of its peak WWF to San Leandro Creek by a Separate Board order.

(5) Maximum LAVWMA flow to EBDA system under LAVWMA-EBDA agreement.

6. The discharge is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 84-30, which allows discharge into Lower San Francisco Bay.

7. EBDA's JEPA delegates the authority and responsibility to EBDA to assure compliance with all effluent waste discharge requirements. It is the intent of the EBDA JEPA to allow determination of compliance with waste discharge requirements by considering EBDA as a total system, to permit the most effective operation of all EBDA and member agency treatment facilities. The EBDA JEPA, therefore empowers that Joint Agency to monitor each member agency's discharge and the combined discharge and prescribes that the Joint Agency may, if necessary, undertake modifications of any member agency's treatment facilities to secure compliance with effluent discharge requirements.

Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPA, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the BOARD, except residual chlorine, for which EBDA will be responsible.

The LAVWMA JEPA limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with requirements.

8. As used herein, "Common Outfall" means the EBDA outfall; "Combined Discharge" refers to the waste stream at any point where all wastes tributary to that outfall are present; and "Individual Treatment Plant" means a treatment facility operated by a member agency or either EBDA or LAVWMA.
9. All EBDA member agencies have implemented approved EPA Local Pretreatment Programs for source control and application of pretreatment standards.
10. Sludge storage sites at the Hayward and Oro Loma Sanitary District plants have the potential for discharge to surface or groundwater and thus constitutes a threatened discharge pursuant to Section 13260 of the Water Code.
11. The Board amended its Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The Basin Plan contains water quality objectives for Lower San Francisco Bay and contiguous waters.
12. The existing and potential beneficial uses of Lower San Francisco Bay and contiguous water bodies are:

- Water contact and non-contact recreation
- Wildlife habitat
- Preservation of rare and endangered habitat
- Estuarine habitat
- Fish migration and spawning
- Industrial service and process supply
- Shellfish harvesting
- Navigation
- Commercial and sport fishing

13. An operation and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
14. This Order serves as an NPDES Permit, reissuance of which is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
15. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger (s) in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant(s) or from any of the joint facilities or individual member collection system(s) and pump stations tributary to the treatment plant is prohibited.
2. The average dry weather flow shall not exceed the existing design average dry weather flows as specified in Finding No. 5 of this Order. Actual average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.

Exceptions to the existing design average dry weather flows in Finding No. 5 up to the maximum of the proposed design average dry weather flows for the EBDA system only may be approved by the Executive Officer upon submittal of a satisfactory technical report demonstrating that compliance with effluent limits at the EBDA outfall will be consistently achieved and that the EBDA commission approves the change. In no instance will the Executive Officer approve design average dry weather flow changes such that the total proposed design average dry weather flow for EBDA is exceeded. The intent of this exception procedure is to consider EBDA as a total system to allow EBDA and its member agencies to operate in the most efficient manner in complying with these waste discharge requirements.

3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits. Compliance with effluent limitations shall be demonstrated in the combined discharge, except that EBDA may elect to demonstrate compliance with requirements denoted by "*" in the discharge from individual member agency treatment plants after prior approval of the Executive Officer. Demonstration of compliance for removal rates will be based upon the algebraic summing of the EBDA agency loadings.

Constituents	Units	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
a. Settleable Matter	ml/l-hr	0.1	-	-	0.2
b. Carbonaceous BOD	mg/l	25	40	50	-
c. Total Suspended Solids	mg/l	30	45	60	-
d. Oil and Grease	mg/l	10	-	20	-

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected approximately the same times during the same period (i.e. 85 percent removal).
- 3.*. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- 4.*. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based on the ten most recent consecutive samples.
5. Representative samples of the effluent shall not exceed the following limits (1):

Constituent	Unit	Daily Average
Arsenic	µg/L	20
Cadmium	µg/L	10
Chromium(IV)	µg/L	11
Copper	µg/L	20
Cyanide	µg/L	25
Lead	µg/L	5.6
Mercury	µg/L	1
Nickel	µg/L	7.1
Silver	µg/L	2.3
Zinc	µg/L	58
Phenols	µg/L	500
PAHs ⁽²⁾	µg/L	15
Selenium ⁽³⁾	µg/L	-

Notes: (1) These limits are intended to be achieved through secondary treatment, source control, and application of pretreatment standards by each EBDA member.

(2) Polynuclear aromatic hydrocarbons

(3) Selenium limit to be established

- 6.* The median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters. Any single sample shall not exceed 10,000 MPN/100 ml.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved Oxygen:
5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved Sulfide:
0.1 mg/l maximum
 - c. pH:
Variation from natural ambient pH by more than 0.5 pH units.
 - d. Un-ionized Ammonia:
0.025 mg/l as N Annual Median, 0.4 mg/l as N Maximum.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Sludge Storage Requirements

1. The discharge of sewage shall not cause waste material to be in a position where it is, or can be carried from the sludge storage site and deposited in the waters of the state.
2. Sludge storage sites shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the storage site. Adequate protection is defined as protection from at least a 100-year storm and protection is defined as protection from the highest possible tidal surge that may occur.
3. The discharge to a sludge storage site of waste other than sewage sludge produced by the discharger facility is prohibited.
4. The storage of sludge shall not cause the degradation of groundwaters.
5. The Executive Officer may require Hayward, Oro Loma Sanitary District, and other EBDA members to prepare a hydrogeologic report that estimates the threat to waters of the State from sewage sludge storage sites.
6. The Board may amend this permit prior to the expiration date, if changes occur in applicable state and federal sludge regulations.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-30. Order No. 84-30 is hereby rescinded.
2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall apply:

$$\text{Mass Emission Limit in lbs/day} = \text{Concentration limit in mg/l} \times 8.34 \times \text{Actual Flow in mgd over the time interval for which the limit applies.}$$
3. The discharger shall comply with all sections of this Order immediately upon adoption.
4. The discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Board by April 15 of each year.
5. The discharger shall annually review and update its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

6. The discharger shall implement and enforce its approved pretreatment program in accordance with Board Order No. 84-60 and its amendments thereafter. The discharger's responsibilities include, but are not limited to:
 - a. Enforcement of National Pretreatment Standards (e.g. prohibited discharges, Categorical Standards, local limits) in accordance with 40 CFR 403.5 and Section 307(b) and (c) of the Clean Water Act.
 - b. Implementation of the pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment Regulations (40 CFR 403) and its approved pretreatment program.
 - c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 84-60 and its amendments thereafter.
7. This Board considers EBDA to be the agency primarily responsible for the combined waste discharge and the discharge of its member agencies in the common outfall. Therefore, in the administration and enforcement of this Order, this Board will first pursue its administrative and/or legal remedies with EBDA. If, however, the Board finds that EBDA does not have the ability or willingness to take appropriate action, or if special, unusual, circumstances arise that indicate that direct action should be taken against a member agency or agencies, this Board may pursue appropriate action against such member agency or agencies.
8. The discharger shall comply with the attached Self-Monitoring Program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986.
10. This Order expires June 21, 1994. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as applicable for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on .

Steven R. Ritchie
Executive Officer

Attachments:

Location Map

Standard Provisions and Reporting Requirements, December 1986

Self-Monitoring Program

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM
FOR**

**EAST BAY DISCHARGE AUTHORITY
CITY OF HAYWARD
CITY OF SAN LEANDRO
ORO LOMA SANITARY DISTRICT
UNION SANITARY DISTRICT**

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

NPDES NO. CA0037869

ORDER NO.

CONSISTING OF

PART A, DATED DECEMBER 1986

AND PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT (ALL EBDA TREATMENT PLANTS)

Station	Description
A-1	At any point in the individual treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment or sidestream.

B. EFFLUENT (ALL EBDA TREATMENT PLANTS AND OUTFALL)

Station	Description
E-1	At any point in the EBDA common outfall at which all waste tributary to that outfall is present.
E-2	At any point in the individual treatment plant facilities at which adequate disinfection has taken place and just prior to where the individual facility transfers control of its effluent to EBDA facilities. Upon approval of the Executive Officer may be the same as E-1.

C. RECEIVING WATERS (SAN FRANCISCO BAY)

Station	Description
C1, C2, C4	Located per station 1, 2, and 4 respectively as shown in Figure 1.
C-R (C3)	Reference station located at station 3 as shown on Figure 1.

D. LAND OBSERVATIONS (ALL EBDA TREATMENT PLANTS AND DECHLORINATION FACILITY)

Station	Description
P-1 through P-n	Located at the corners and midpoints of the perimeter fenceline surrounding the individual and EBDA facilities (A sketch showing the locations of these stations will accompany each report).

E. OVERFLOWS AND BYPASSES (ALL EBDA TREATMENT PLANTS, COLLECTION SYSTEMS, INTERCEPTOR AND OUTFALL)

Station	Description
O-1 through O-n	Bypass or overflows from manholes, pump stations, interceptor, or collection system.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. ◊.**
- 2. Has been ordered by the Regional Board on ◊.**
- 3. May be revised pursuant to CFR 122.36 or by the Regional Board.**

**Steven R. Ritchie
Executive Officer**

Attachments:

**Table 1
Figure 1**

(1),(7)

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-1	E-1		E-2		All P Sta.	All O Sta.	All C Sta.			
TYPE OF SAMPLE	C-24	G (3)	C-24	CONT.	G (3)	C-24	CONT	O	O	G/D	
Flow Rate (mgd)	D			D			D				
BOD, 5-day, 20°C, or COD (mg/l & kg/day) (2)	S/W		S/W			S/W					
Chlorine Residual & Dosage (mg/l & kg/day) (6)		H or CONT.			H or CONT.						
Settleable Matter (ml/l-hr. & cu. ft./day)		D									
Total Suspended Matter (mg/l & kg/day) (2)	S/W		S/W			S/W					
Oil and Grease (mg/l & kg/day) (3)		2/M									
Coliform (Total or Fecal) (MPN/100 ml) per req't		3/W							M		
Fish Tox'y 96-hr. Surv'l in undiluted waste			2/M								
Ammonia Nitrogen (mg/l & kg/day)			4/M						M		
Nitrate Nitrogen (mg/l & kg/day)											
Nitrite Nitrogen (mg/l & kg/day)											
Total Organic Nitrogen (mg/l & kg/day)											
Total Phosphate (mg/l & kg/day)											
Turbidity (Jackson Turbidity Units)											
pH (units)		D							M		
Dissolved Oxygen (mg/l and % Saturation)									M		
Temperature (°C)		D							M		
Apparent Color (color units)											
Secchi Disc (inches)									M		
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)									M		
Arsenic (mg/l & kg/day)			W (5)			M (5)					
Cadmium (mg/l & kg/day)			W (5)			M (5)					
Chromium, Total (mg/l & kg/day)			W (5)			M (5)					
Copper (mg/l & kg/day)			W (5)			M (5)					
Cyanide (mg/l & kg/day)			W (5)			M (5)					
Silver (mg/l & kg/day)			W (5)			M (5)					
Lead (mg/l & kg/day)			W (5)			M (5)					

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-1	E-1		E-2			All P Sta.	All D Sta.	All C Sta.			
TYPE OF SAMPLE	C-24	G ⁽³⁾	C-24	cont.	G ⁽³⁾	C-24	cont.	O	O	G ⁽⁴⁾		
Mercury (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Nickel (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Zinc (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
PHENOLIC COMPOUNDS (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
All Applicable Standard Observations												
Bottom Sediment Analyses and Observations												
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)												
Selenium (mg/L + kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/L + kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
 C-24 = composite sample - 24-hour
 C-X = composite sample - X hours
 (used when discharge does not
 continue for 24-hour period)
 Cont = continuous sampling
 DI = depth-integrated sample
 BS = bottom sediment sample
 O = observation

FREQUENCY OF SAMPLING

E = each occurrence
 H = once each hour
 D = once each day
 W = once each week
 M = once each month
 Y = once each year

TYPES OF STATIONS

I = intake and/or water supply stations
 A = treatment facility influent stations
 E = waste effluent stations
 C = receiving water stations
 P = treatment facilities perimeter stations
 L = basin and/or pond levee stations
 B = bottom sediment stations
 G = groundwater stations

2/H = twice per hour
 2/W = 2 days per week
 5/W = 5 days per week
 2/M = 2 days per month
 2/Y = once in March and
 once in September
 Q = quarterly, once in
 March, June, Sept.
 and December

2H = every 2 hours
 2D = every 2 days
 2W = every 2 weeks
 3M = every 3 months
 Cont = continuous

NOTES FOR TABLE 1

1. During any day when bypassing occurs from any treatment unit(s) in the plant or to the emergency outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:

- a. Composite sample for BOD and Total Suspended Solids.**
- b. Grab samples for Total Coliform, Settlable Matter and Oil and Grease.**
- c. Continuous monitoring of flow.**
- d. Continuous or every two hour monitoring of chlorine residual.**

The above requirement will not apply if a portion of the plant's flow bypasses the secondary treatment unit during peak wet weather periods in order to prevent solids washout.

2. Percent removal (effluent vs. influent) shall also be reported.

3. Grab samples shall be taken on day(s) of composite sampling.

4. Fish toxicity test compliance may be demonstrated in the EBDA combined outfall. Compliance bioassays shall be performed using two test fish species in parallel flow through bioassay tests. One shall be the three-spine stickleback and the other shall be the fathead minnow. Chlorinated samples may be used following dechlorination.

In the event that a fish toxicity violation is detected, the discharger shall also perform toxicity tests at the individual treatment plant until compliance is achieved. The individual plants may use static renewal tests in lieu of flow through tests.

5. If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples. The Executive Officer may reduce basic sampling frequency after one year if lesser frequencies will provide statistically valid results.

6. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation.

7. Monthly sampling dates and approximate times shall coincide with receiving water monitoring conducted by EBDA.

8. Sludge disposal shall be reported monthly. Daily records shall be kept of the quantity (cu. yds. or cu. ft.) and solids content (%) of dewatered sludge disposed of and the location of disposal.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
1111 JACKSON STREET, ROOM 6040
OAKLAND, CALIFORNIA 94607**

**FACT SHEET
FOR MAILING TO INTERESTED PERSONS AND GOVERNMENT AGENCIES**

East Bay Discharge Authority (EBDA) has applied to the Regional Water Quality Control Board, San Francisco Bay Region (the Board) for re-issuance of its NPDES Permit (CA0037869) for discharge of pollutants to State waters.

I. DISCHARGE DESCRIPTION

1. Both EBDA and (Livermore-Amador Valley Water Management Agency) LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities. LAVWMA will transport effluent from its member agencies to the EBDA system in its transmission, flow-equalization, chlorination, and pumping facilities. By contractual agreement, EBDA will transport LAVWMA treated wastewater jointly with the treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west to the Oakland Airport at longitude 122 18' west, latitude 37 42' north. The outfall's diffuser is located 30,000 feet from shore; it discharges 23.5 feet below the surface at (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 50% of the time.

2. All the EBDA member agencies currently operate, and will continue to operate, their own collection and treatment facilities.

3. The existing and proposed waste discharge volumes are as follows:

Agency .	Actual 1987 ADWF ⁽¹⁾	Design Existing ADWF	Capacity Proposed ADWF	Peak WWF ⁽⁴⁾
EBDA				
San Leandro	4.6	7.6	7.6	22.3
Oro Loma Sanitary District	14.0	20.0	20.0	69.2
Hayward ⁽²⁾	12.4	13.1	16.5	35.0
Union Sanitary District ⁽²⁾	22.9	19.7	30.0	42.9
Subtotal	53.9	60.4	74.1	169.4
LAVWMA	12.0	15.3	20.0	19.7 ⁽⁵⁾
Totals	65.9	75.7	97.1	189.1

NOTES: (1) Average Dry Weather Flow (ADWF); All units in million gallons per day (mgd).

(2) Hayward and Union Sanitary Districts are in the process of documenting additional capacity already provided.

(3) Portions of the treated effluent from the member agencies are used for reclamation and marsh enhancement. These activities are regulated separately by the Board.

(4) Wet Weather Flow (WWF); Sum does not equal parts due to timing of peaks. LAVWMA is authorized to discharge a portion of its peak WWF to San Leandro Creek by Separate Board order.

(5) Maximum LAVWMA flow to EBDA system under LAVWMA-EBDA agreement.

6. The discharge is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 84-30, which allows discharge into Lower San Francisco Bay.

5. EBDA's JEPA delegates the authority and responsibility to EBDA to assure compliance with all effluent waste discharge requirements. It is the intent of the EBDA JEPA to allow determination of compliance with waste discharge requirements by considering EBDA as a total system, to permit the most effective operation of all EBDA and member agency treatment facilities. The EBDA JEPA, therefore empowers that Joint Agency to monitor each member agency's discharge and the combined discharge and prescribes that the Joint Agency may, if necessary, undertake modifications of any member agency's treatment facilities to secure compliance with effluent discharge requirements.

Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPa, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the BOARD, except residual chlorine, for which EBDA will be responsible.

The LAVWMA JEPa limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with requirements.

6. All EBDA member agencies have implemented approved EPA Local Pretreatment Programs for source control and application of pretreatment standards.

7. Sludge storage sites at the Hayward and Oro Loma Sanitary District plants have the potential for discharge to surface or groundwater and thus constitutes a threatened discharge pursuant to Section 13260 of the Water Code.

II. SPECIFIC RATIONALE

Discharge prohibition A.1 (no bypass or overflow of untreated wastewaters): The Basin Plan prohibits discharge of untreated wastes (Chapter 4).

Discharge Prohibition A.2 (average dry weather flow): This prohibition assures that the design capacity of the individual treatment plants and joint-use facilities, such as the force main and outfall, are not exceeded. It also complies with EPA regulations for mass emission limitations (40 CFR 122.45).

Discharge Prohibition A.3 (no discharge receiving less than 10:1 dilution or to dead-end sloughs (Chapter 4, Discharge Prohibition No. 1)): The discharger is conditionally exempt from these two prohibitions provided the Provisions contained in the NPDES permit are met.

Effluent Limitations B.1.2, B.1.d, and B.1.e (settleable matter, oil and grease, and chlorine residual): The Basin Plan establishes minimum effluent standards for these constituents (Chapter 4).

Effluent Limitations B.1.b, B.1.c, B.2, and B.3 (Suspended solids 85% removal, and pH): Secondary treatment requirements from EPA regulations (40 CFR 133.102).

Receiving Water Limitations C.1 (conditions to be avoided): These limits come from Basin Plan (Chapter 3).

Receiving Water Limitations C.2 (specific limitations): These limits come from the Basin Plan (Chapter 3).

Sludge Storage Requirement D: This requirement comes from the Basin Plan (Chapter 4), and 40 CFR 257.

Provision E.1 through E.10 (rescind old order, mass loading conversion, immediate compliance, Operations and Maintenance manual, contingency plan, pre-treatment program, lead agency, self-monitoring program, standard provisions, expiration and reapplication): These provisions come from EPA regulations (40 CFR Part 122).

Provision E.11 (EPA concurrence): This provision is based on 40 CFR Part 123.

III. REVIEW PROCEDURES

The proposed permit requirements, rationale, and other supporting information are on file in Room 6000, 1111 Jackson Street, Oakland, CA 94607. They may be inspected between 8:00 am and 5:00 pm, on Monday through Friday. For further information please contact Cheryl Niemi at (415) 464-1262.

The Board intends to hold a public hearing and consider adopting the Tentative Order during a public meeting on June 21, 1989, beginning at 9:30 am. The meeting will be held in the first floor Assembly Room of the State Office Building, 1111 Jackson Street, Oakland, California. Persons wishing to make oral comments at the hearing are required to submit a written copy of their comments at the meeting, if possible.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

TENTATIVE ORDER

NPDES NO. CA0037869

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

**EAST BAY DISCHARGERS AUTHORITY
CITY OF HAYWARD
CITY OF SAN LEANDRO
ORO LOMA SANITARY DISTRICT
UNION SANITARY DISTRICT**

AND

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The East Bay Dischargers Authority (EBDA), by application dated December 1, 1988, on behalf of itself and its member agencies above, has submitted a report of waste discharge for reissuance of NPDES Permit No. CA0037869 to discharge combined wastes through a common outfall under the National Pollutant Discharge Elimination System (NPDES).
2. The Livermore-Amador Valley Water Management Agency (LAVWMA) member agencies have also applied for waste discharge requirements and renewal of NPDES Permits to discharge wastes through the EBDA outfall. EBDA and its member agencies, and LAVWMA are hereinafter collectively and individually referred to as dischargers. These waste discharge requirements are primarily for regulation of EBDA and its member agencies and the operation of the EBDA joint outfall facilities. Separate effluent waste discharge requirements have been adopted by the Board for the City of Livermore (Order No. , NPDES No. CA00378006) and Dublin-San Ramon Services District (Order No. 89-, NPDES No. CA0037613).
3. Both EBDA and LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities. LAVWMA will transport effluent from its member agencies to the EBDA system in its transmission, flow-equalization, chlorination, and pumping facilities. By contractual agreement, EBDA will transport LAVWMA treated wastewater jointly with the treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west to the Oakland Airport at longitude 122 18' west, latitude 37 42' north. The outfall's diffuser is located 30,000 feet from shore; it discharges 23.5 feet below the surface at (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 50% of the time.

4. All the EBDA member agencies currently operate, and will continue to operate, their own collection and treatment facilities.

5. The existing and proposed waste discharge volumes are as followx:

Agency	Actual 1987 ADWF ⁽¹⁾	Design Existing ADWF	Capacity Proposed ADWF	Peak WWF ⁽⁴⁾
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LAVWMA	12.0	15.3	20.0	19.7⁽⁵⁾
Totals	65.9	75.7	97.1	189.1

NOTES: (1) Average Dry Weather Flow (ADWF); All units in million gallons per day (mgd).

(2) Hayward and Union Sanitary Districts are in the process of documenting additional capacity already provided.

(3) Portions of the treated effluent from the member agencies are used for reclamation and marsh enhancement. These activities are regulated separately by the Board.

(4) Wet Weather Flow (WWF); Sum does not equal parts due to timing of peaks. LAVWMA is authorized to discharge a portion of its peak WWF to San Leandro Creek by a Separate Board order.

(5) Maximum LAVWMA flow to EBDA system under LAVWMA-EBDA agreement.

6. The discharge is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 84-30, which allows discharge into Lower San Francisco Bay.

7. EBDA's JEPA delegates the authority and responsibility to EBDA to assure compliance with all effluent waste discharge requirements. It is the intent of the EBDA JEPA to allow determination of compliance with waste discharge requirements by considering EBDA as a total system, to permit the most effective operation of all EBDA and member agency treatment facilities. The EBDA JEPA, therefore empowers that Joint Agency to monitor each member agency's discharge and the combined discharge and prescribes that the Joint Agency may, if necessary, undertake modifications of any member agency's treatment facilities to secure compliance with effluent discharge requirements.

Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPA, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the BOARD, except residual chlorine, for which EBDA will be responsible.

The LAVWMA JEPA limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with requirements.

8. As used herein, "Common Outfall" means the EBDA outfall; "Combined Discharge" refers to the waste stream at any point where all wastes tributary to that outfall are present; and "Individual Treatment Plant" means a treatment facility operated by a member agency or either EBDA or LAVWMA.
9. All EBDA member agencies have implemented approved EPA Local Pretreatment Programs for source control and application of pretreatment standards.
10. Sludge storage sites at the Hayward and Oro Loma Sanitary District plants have the potential for discharge to surface or groundwater and thus constitutes a threatened discharge pursuant to Section 13260 of the Water Code.
11. The Board amended its Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The Basin Plan contains water quality objectives for Lower San Francisco Bay and contiguous waters.
12. The existing and potential beneficial uses of Lower San Francisco Bay and contiguous water bodies are:

- Water contact and non-contact recreation
- Wildlife habitat
- Preservation of rare and endangered habitat
- Estuarine habitat
- Fish migration and spawning
- Industrial service and process supply
- Shellfish harvesting
- Navigation
- Commercial and sport fishing

13. An operation and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
14. This Order serves as an NPDES Permit, reissuance of which is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
15. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger (s) in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant(s) or from any of the joint facilities or individual member collection system(s) and pump stations tributary to the treatment plant is prohibited.
2. The average dry weather flow shall not exceed the existing design average dry weather flows as specified in Finding No. 5 of this Order. Actual average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.

Exceptions to the existing design average dry weather flows in Finding No. 5 up to the maximum of the proposed design average dry weather flows for the EBDA system only may be approved by the Executive Officer upon submittal of a satisfactory technical report demonstrating that compliance with effluent limits at the EBDA outfall will be consistently achieved and that the EBDA commission approves the change. In no instance will the Executive Officer approve design average dry weather flow changes such that the total proposed design average dry weather flow for EBDA is exceeded. The intent of this exception procedure is to consider EBDA as a total system to allow EBDA and its member agencies to operate in the most efficient manner in complying with these waste discharge requirements.

3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits. Compliance with effluent limitations shall be demonstrated in the combined discharge, except that EBDA may elect to demonstrate compliance with requirements denoted by "*" in the discharge from individual member agency treatment plants after prior approval of the Executive Officer. Demonstration of compliance for removal rates will be based upon the algebraic summing of the EBDA agency loadings.

Constituents	Units	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
a. Settleable Matter	ml/l-hr	0.1	-	-	0.2
b. Carbonaceous BOD	mg/l	25	40	50	-
c. Total Suspended Solids	mg/l	30	45	60	-
d. Oil and Grease	mg/l	10	-	20	-

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected approximately the same times during the same period (i.e. 85 percent removal).
- 3.*. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- 4.*. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based on the ten most recent consecutive samples.
5. Representative samples of the effluent shall not exceed the following limits (1):

Constituent	Unit	Daily Average
Arsenic	µg/L	20
Cadmium	µg/L	10
Chromium(IV)	µg/L	11
Copper	µg/L	20
Cyanide	µg/L	25
Lead	µg/L	5.6
Mercury	µg/L	1
Nickel	µg/L	7.1
Silver	µg/L	2.3
Zinc	µg/L	58
Phenols	µg/L	500
PAHs ⁽²⁾	µg/L	15
Selenium ⁽³⁾	µg/L	-

- Notes: (1) These limits are intended to be achieved through secondary treatment, source control, and application of pretreatment standards by each EBDA member.
- (2) Polynuclear aromatic hydrocarbons
- (3) Selenium limit to be established

- 6.* The median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters. Any single sample shall not exceed 10,000 MPN/100 ml.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. **Dissolved Oxygen:**
5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. **Dissolved Sulfide:**
0.1 mg/l maximum
 - c. **pH:**
Variation from natural ambient pH by more than 0.5 pH units.
 - d. **Un-ionized Ammonia:**
0.025 mg/l as N Annual Median, 0.4 mg/l as N Maximum.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Sludge Storage Requirements

1. The discharge of sewage shall not cause waste material to be in a position where it is, or can be carried from the sludge storage site and deposited in the waters of the state.
2. Sludge storage sites shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the storage site. Adequate protection is defined as protection from at least a 100-year storm and protection is defined as protection from the highest possible tidal surge that may occur.
3. The discharge to a sludge storage site of waste other than sewage sludge produced by the discharger facility is prohibited.
4. The storage of sludge shall not cause the degradation of groundwaters.
5. The Executive Officer may require Hayward, Oro Loma Sanitary District, and other EBDA members to prepare a hydrogeologic report that estimates the threat to waters of the State from sewage sludge storage sites.
6. The Board may amend this permit prior to the expiration date, if changes occur in applicable state and federal sludge regulations.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-30. Order No. 84-30 is hereby rescinded.
2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall apply:

$$\text{Mass Emission Limit in lbs/day} = \text{Concentration limit in mg/l} \times 8.34 \times \text{Actual Flow in mgd over the time interval for which the limit applies.}$$
3. The discharger shall comply with all sections of this Order immediately upon adoption.
4. The discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Board by April 15 of each year.
5. The discharger shall annually review and update its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

6. The discharger shall implement and enforce its approved pretreatment program in accordance with Board Order No. 84-60 and its amendments thereafter. The discharger's responsibilities include, but are not limited to:
 - a. Enforcement of National Pretreatment Standards (e.g. prohibited discharges, Categorical Standards, local limits) in accordance with 40 CFR 403.5 and Section 307(b) and (c) of the Clean Water Act.
 - b. Implementation of the pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment Regulations (40 CFR 403) and its approved pretreatment program.
 - c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 84-60 and its amendments thereafter.
7. This Board considers EBDA to be the agency primarily responsible for the combined waste discharge and the discharge of its member agencies in the common outfall. Therefore, in the administration and enforcement of this Order, this Board will first pursue its administrative and/or legal remedies with EBDA. If, however, the Board finds that EBDA does not have the ability or willingness to take appropriate action, or if special, unusual, circumstances arise that indicate that direct action should be taken against a member agency or agencies, this Board may pursue appropriate action against such member agency or agencies.
8. The discharger shall comply with the attached Self-Monitoring Program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986.
10. This Order expires June 21, 1994. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as applicable for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on .

Steven R. Ritchie
Executive Officer

Attachments:

Location Map

Standard Provisions and Reporting Requirements, December 1986

Self-Monitoring Program

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM
FOR**

**EAST BAY DISCHARGE AUTHORITY
CITY OF HAYWARD
CITY OF SAN LEANDRO
ORO LOMA SANITARY DISTRICT
UNION SANITARY DISTRICT**

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

NPDES NO. CA0037869

ORDER NO.

CONSISTING OF

PART A, DATED DECEMBER 1986

AND PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT (ALL EBDA TREATMENT PLANTS)

Station	Description
A-1	At any point in the individual treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment or sidestream.

B. EFFLUENT (ALL EBDA TREATMENT PLANTS AND OUTFALL)

Station	Description
E-1	At any point in the EBDA common outfall at which all waste tributary to that outfall is present.
E-2	At any point in the individual treatment plant facilities at which adequate disinfection has taken place and just prior to where the individual facility transfers control of its effluent to EBDA facilities. Upon approval of the Executive Officer may be the same as E-1.

C. RECEIVING WATERS (SAN FRANCISCO BAY)

Station	Description
C1, C2, C4	Located per station 1, 2, and 4 respectively as shown in Figure 1.
C-R (C3)	Reference station located at station 3 as shown on Figure 1.

D. LAND OBSERVATIONS (ALL EBDA TREATMENT PLANTS AND DECHLORINATION FACILITY)

Station	Description
P-1 through P-n	Located at the corners and midpoints of the perimeter fenceline surrounding the individual and EBDA facilities (A sketch showing the locations of these stations will accompany each report).

E. OVERFLOWS AND BYPASSES (ALL EBDA TREATMENT PLANTS, COLLECTION SYSTEMS, INTERCEPTOR AND OUTFALL)

Station	Description
O-1 through O-n	Bypass or overflows from manholes, pump stations, interceptor, or collection system.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. ◊.**
- 2. Has been ordered by the Regional Board on ◊.**
- 3. May be revised pursuant to CFR 122.36 or by the Regional Board.**

**Steven R. Ritchie
Executive Officer**

Attachments:

**Table 1
Figure 1**

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

(1),(7)

Sampling Station	A-1	E-1		E-2		All P Sta.	All O Sta.	All C Sta.						
TYPE OF SAMPLE	C-24	G (3)	C-24	cont.	G (3)	C-24	CONT	O	O	G/D				
Flow Rate (mgd)	D			D			D							
BOD, 5-day, 20° C, or COD (mg/l & kg/day) (2)	S/W		S/W			S/W								
Chlorine Residual & Dosage (mg/l & kg/day) (6)		H or CONT.			H or CONT.									
Settleable Matter (ml/1-hr. & cu. ft./day)		D												
Total Suspended Matter (mg/l & kg/day) (2)	S/W		S/W			S/W								
Oil and Grease (mg/l & kg/day) (3)		2/M												
Coliform (Total or Fecal) (MPN/100 ml) per req't		3/W							M					
Fish Tox'y 96-hr. Surv'l in undiluted waste			2/M											
Ammonia Nitrogen (mg/l & kg/day)			4/M						M					
Nitrate Nitrogen (mg/l & kg/day)														
Nitrite Nitrogen (mg/l & kg/day)														
Total Organic Nitrogen (mg/l & kg/day)														
Total Phosphate (mg/l & kg/day)														
Turbidity (Jackson Turbidity Units)														
pH (units)		D							M					
Dissolved Oxygen (mg/l and % Saturation)									M					
Temperature (°C)		D							M					
Apparent Color (color units)														
Becchi Disc (inches)									M					
Sulfides (if DO < 5.0 mg/l)									M					
Total & Dissolved (mg/l)														
Arsenic (mg/l & kg/day)			W (5)			M (5)								
Cadmium (mg/l & kg/day)			W (5)			M (5)								
Chromium, Total (mg/l & kg/day)			W (5)			M (5)								
Copper (mg/l & kg/day)			W (5)			M (5)								
Cyanide (mg/l & kg/day)			W (5)			M (5)								
Silver (mg/l & kg/day)			W (5)			M (5)								
Lead (mg/l & kg/day)			W (5)			M (5)								

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-1	E-1		E-2			All P Sta.	All D Sta.	All C Sta.			
TYPE OF SAMPLE	C-24	G ⁽³⁾	C-24	cont.	G ⁽³⁾	C-24	cont.	O	O	G ⁽⁴⁾		
Mercury (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Nickel (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Zinc (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
PHENOLIC COMPOUNDS (mg/l & kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
All Applicable Standard Observations												
Bottom Sediment Analyses and Observations												
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)												
Selenium (mg/L + Kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/L + Kg/day)			W ⁽⁵⁾			M ⁽⁵⁾						

LEGEND FOR TABLE

TYPES OF SAMPLES

- G = grab sample
- C-24 = composite sample - 24-hour
- C-X = composite sample - X hours
(used when discharge does not
continue for 24-hour period)
- Cont = continuous sampling
- DI = depth-integrated sample
- BS = bottom sediment sample
- O = observation

FREQUENCY OF SAMPLING

- E = each occurrence
- H = once each hour
- D = once each day
- W = once each week
- M = once each month
- Y = once each year

TYPES OF STATIONS

- I = intake and/or water supply stations
- A = treatment facility influent stations
- E = waste effluent stations
- C = receiving water stations
- P = treatment facilities perimeter stations
- L = basin and/or pond levee stations
- B = bottom sediment stations
- G = groundwater stations

- 2/H = twice per hour
- 2/W = 2 days per week
- 5/W = 5 days per week
- 2/M = 2 days per month
- 2/Y = once in March and
once in September

- 2H = every 2 hours
- 2D = every 2 days
- 2W = every 2 weeks
- 3M = every 3 months
- Cont = continuous

- Q = quarterly, once in
March, June, Sept.
and December

NOTES FOR TABLE 1

1. During any day when bypassing occurs from any treatment unit(s) in the plant or to the emergency outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:

- a. Composite sample for BOD and Total Suspended Solids.
- b. Grab samples for Total Coliform, Settlable Matter and Oil and Grease.
- c. Continuous monitoring of flow.
- d. Continuous or every two hour monitoring of chlorine residual.

The above requirement will not apply if a portion of the plant's flow bypasses the secondary treatment unit during peak wet weather periods in order to prevent solids washout.

2. Percent removal (effluent vs. influent) shall also be reported.

3. Grab samples shall be taken on day(s) of composite sampling.

4. Fish toxicity test compliance may be demonstrated in the EBDA combined outfall. Compliance bioassays shall be performed using two test fish species in parallel flow through bioassay tests. One shall be the three-spine stickleback and the other shall be the fathead minnow. Chlorinated samples may be used following dechlorination.

In the event that a fish toxicity violation is detected, the discharger shall also perform toxicity tests at the individual treatment plant until compliance is achieved. The individual plants may use static renewal tests in lieu of flow through tests.

5. If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples. The Executive Officer may reduce basic sampling frequency after one year if lesser frequencies will provide statistically valid results.

6. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation.

7. Monthly sampling dates and approximate times shall coincide with receiving water monitoring conducted by EBDA.

8. Sludge disposal shall be reported monthly. Daily records shall be kept of the quantity (cu. yds. or cu. ft.) and solids content (%) of dewatered sludge disposed of and the location of disposal.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
1111 JACKSON STREET, ROOM 6040
OAKLAND, CALIFORNIA 94607**

**FACT SHEET
FOR MAILING TO INTERESTED PERSONS AND GOVERNMENT AGENCIES**

East Bay Discharge Authority (EBDA) has applied to the Regional Water Quality Control Board, San Francisco Bay Region (the Board) for re-issuance of its NPDES Permit (CA0037869) for discharge of pollutants to State waters.

I. DISCHARGE DESCRIPTION

1. Both EBDA and (Livermore-Amador Valley Water Management Agency) LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities. LAVWMA will transport effluent from its member agencies to the EBDA system in its transmission, flow-equalization, chlorination, and pumping facilities. By contractual agreement, EBDA will transport LAVWMA treated wastewater jointly with the treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west to the Oakland Airport at longitude 122 18' west, latitude 37 42' north. The outfall's diffuser is located 30,000 feet from shore; it discharges 23.5 feet below the surface at (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 50% of the time.

2. All the EBDA member agencies currently operate, and will continue to operate, their own collection and treatment facilities.

3. The existing and proposed waste discharge volumes are as follows:

Agency .	Actual 1987 ADWF ⁽¹⁾	Design Existing ADWF	Capacity Proposed ADWF	Peak WWF ⁽⁴⁾
EBDA				
San Leandro	4.6	7.6	7.6	22.3
Oro Loma Sanitary District	14.0	20.0	20.0	69.2
Hayward ⁽²⁾	12.4	13.1	16.5	35.0
Union Sanitary District ⁽²⁾	22.9	19.7	30.0	42.9
Subtotal	53.9	60.4	74.1	169.4
LAVWMA	12.0	15.3	20.0	19.7 ⁽⁵⁾
Totals	65.9	75.7	97.1	189.1

NOTES: (1) Average Dry Weather Flow (ADWF); All units in million gallons per day (mgd).

(2) Hayward and Union Sanitary Districts are in the process of documenting additional capacity already provided.

(3) Portions of the treated effluent from the member agencies are used for reclamation and marsh enhancement. These activities are regulated separately by the Board.

(4) Wet Weather Flow (WWF); Sum does not equal parts due to timing of peaks. LAVWMA is authorized to discharge a portion of its peak WWF to San Leandro Creek by Separate Board order.

(5) Maximum LAVWMA flow to EBDA system under LAVWMA-EBDA agreement.

6. The discharge is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 84-30, which allows discharge into Lower San Francisco Bay.

5. EBDA's JEPA delegates the authority and responsibility to EBDA to assure compliance with all effluent waste discharge requirements. It is the intent of the EBDA JEPA to allow determination of compliance with waste discharge requirements by considering EBDA as a total system, to permit the most effective operation of all EBDA and member agency treatment facilities. The EBDA JEPA, therefore empowers that Joint Agency to monitor each member agency's discharge and the combined discharge and prescribes that the Joint Agency may, if necessary, undertake modifications of any member agency's treatment facilities to secure compliance with effluent discharge requirements.

Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPA, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the BOARD, except residual chlorine, for which EBDA will be responsible.

The LAVWMA JEPA limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with requirements.

6. All EBDA member agencies have implemented approved EPA Local Pretreatment Programs for source control and application of pretreatment standards.

7. Sludge storage sites at the Hayward and Oro Loma Sanitary District plants have the potential for discharge to surface or groundwater and thus constitutes a threatened discharge pursuant to Section 13260 of the Water Code.

II. SPECIFIC RATIONALE

Discharge prohibition A.1 (no bypass or overflow of untreated wastewaters): The Basin Plan prohibits discharge of untreated wastes (Chapter 4).

Discharge Prohibition A.2 (average dry weather flow): This prohibition assures that the design capacity of the individual treatment plants and joint-use facilities, such as the force main and outfall, are not exceeded. It also complies with EPA regulations for mass emission limitations (40 CFR 122.45).

Discharge Prohibition A.3 (no discharge receiving less than 10:1 dilution or to dead-end sloughs (Chapter 4, Discharge Prohibition No. 1)): The discharger is conditionally exempt from these two prohibitions provided the Provisions contained in the NPDES permit are met.

Effluent Limitations B.1.2, B.1.d, and B.1.e (settleable matter, oil and grease, and chlorine residual): The Basin Plan establishes minimum effluent standards for these constituents (Chapter 4).

Effluent Limitations B.1.b, B.1.c, B.2, and B.3 (Suspended solids 85% removal, and pH): Secondary treatment requirements from EPA regulations (40 CFR 133.102).

Receiving Water Limitations C.1 (conditions to be avoided): These limits come from Basin Plan (Chapter 3).

Receiving Water Limitations C.2 (specific limitations): These limits come from the Basin Plan (Chapter 3).

Sludge Storage Requirement D: This requirement comes from the Basin Plan (Chapter 4), and 40 CFR 257.

Provision E.1 through E.10 (rescind old order, mass loading conversion, immediate compliance, Operations and Maintenance manual, contingency plan, pre-treatment program, lead agency, self-monitoring program, standard provisions, expiration and reapplication): These provisions come from EPA regulations (40 CFR Part 122).

Provision E.11 (EPA concurrence): This provision is based on 40 CFR Part 123.

III. REVIEW PROCEDURES

The proposed permit requirements, rationale, and other supporting information are on file in Room 6000, 1111 Jackson Street, Oakland, CA 94607. They may be inspected between 8:00 am and 5:00 pm, on Monday through Friday. For further information please contact Cheryl Niemi at (415) 464-1262.

The Board intends to hold a public hearing and consider adopting the Tentative Order during a public meeting on June 21, 1989, beginning at 9:30 am. The meeting will be held in the first floor Assembly Room of the State Office Building, 1111 Jackson Street, Oakland, California. Persons wishing to make oral comments at the hearing are required to submit a written copy of their comments at the meeting, if possible.